



***Phase I Environmental
Site Assessment
Former Conservation Chemical Company of Illinois
6500 Industrial Highway
Gary, Indiana 46406***

**Prepared for:
Gary/Chicago International Airport Authority**



Quality Environmental Professionals, Inc.

Submitted by:

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This report was prepared to assist the Gary/Chicago International Airport Authority in establishing "due diligence" regarding the former Conservation Chemical Company of Illinois property, formerly located at 6500 Industrial Highway in Gary, Indiana. The assessment area consists of 4.1 acres of land that was formerly used as a conversion facility for industrial waste and as a manufacturer of iron salt coagulants. The site is currently vacant with the exception of one maintenance storage shed. The property is currently owned by the Gary/Chicago International Airport Authority. Mr. Nivas R. Vijay, Project Manager with Quality Environmental Professionals, Inc. (Qepi), conducted this Phase I Environmental Site Assessment (Phase I ESA).

This Phase I ESA was conducted in general conformance with American Society of Testing and Materials (ASTM) Standards for Phase I Environmental Site Assessments (ASTM E 1527-05), including the United States Environmental Protection Agency's (USEPA) All Appropriate Inquiries (AAI) Rule that was finalized on November 1, 2005. The Phase I ESA scope of services included a review of environmental regulatory records and a visual inspection of the subject property. Issues considered include site history, adjacent properties that could have an impact on the site, the presence of wetlands, the basic presence of suspect asbestos-containing materials (ACM), the presence of other hazardous material(s) onsite, storage tanks (underground and aboveground), and Comprehensive Environmental Response, Compensation, and Liability Act/Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLA/ CERCLIS) involvement and spills.

Qepi has performed a Phase I ESA in general conformance with the scope and limitations of ASTM Practice E 1527-05 and USEPA AAI Rule for the property formerly located at 6500 Industrial Highway in Gary, Indiana. This assessment revealed the following Recognized Environmental Conditions (RECs) in connection with the property:

- The site historically operated as a converter of industrial waste, storing and treating spent acids, oils, solvents and scrap metals. In addition to these operations, the site historically produced ferric chloride to manufacture iron salt coagulants, utilizing waste pickling liquor and chlorine gas along with scrap metal and waste acids. These operations took place from 1967 to 1975 and from 1980 to 1985. Removal activities at the site have documented the presence of stored cyanide solids and liquids, polychlorinated biphenyl (PCB) impacted solids and liquids, acid solids and liquids, caustic solids and liquids, waste oils, metal impacted solids and liquids, ferric chloride, chlorinated hydrocarbons and hazardous sludge onsite.

Potential impacts associated with these types of operations include cyanides, metals, solvents, PCBs, solvents, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs).

- From 1975 to 1980 the site operated as a hazardous waste terminal and treatment facility. Cyanide, organic solvents, plating wastes and waste oils were treated, primarily through waste neutralization, and disposed of or stored onsite. Removal activities at the site have documented the presence of stored cyanide solids and liquids, PCB-impacted solids and

liquids, acid solids and liquids, caustic solids and liquids, waste oils, metal impacted solids and liquids and hazardous sludge onsite.

Potential impacts associated with these types of operations include cyanides, metals, solvents, PCBs, VOCs and SVOCs.

- The site historically operated as an oil refinery from at least 1952 to 1966. Historical data collected indicated that tanks and drums containing waste oils, fuel oil and impacted soils and sludge were contained onsite and reutilized in site operations conducted after the refinery closure. Currently the site is operating an oil recovery remediation system, which includes the pumping and treatment of free phase liquid oil product from the groundwater aquifer.

Potential impacts associated with this type of operation include petroleum hydrocarbons, metals, PCBs, VOCs and waste oils.

- The site historically had contained numerous above ground storage tanks (ASTs), several of which were utilized by both the refinery and the chemical company. Prior evaluations conducted at the site detailed the inventories and deteriorating condition of several of the tanks in operation. Additionally, leaks and spills associated with the tanks have been historically recorded. Stained soil has been historically observed surrounding ASTs at the site. Tanks at the site have been known to store cyanide solids and liquids, PCB-impacted solids and liquids, acid solids and liquids, caustic solids and liquids, waste oils, metal impacted solids and liquids, ferric chloride, chlorinated hydrocarbons and hazardous sludge.

In addition to ASTs, numerous drums have been stored and buried onsite. Prior evaluations reported drums staged throughout the property, with a majority in a deteriorating condition. Over pack drums and leaking drums have been historically observed onsite. Drum contents have been noted to store cyanide liquids, PCB-impacted solids and liquids, acid solids and liquids, caustic solids, waste oils, ferric chloride, chlorinated hydrocarbons and hazardous sludge.

Potential impacts to soil and groundwater based on leakage and spillage of tanks and drums at the property are present.

In addition to the RECs, the following Business Environmental Risks (BERs) were noted.

- The site is located in a heavily industrialized area in Gary, Indiana. Businesses located adjacent to the subject site have included an oil refinery, petroleum service stations, concrete and metal pipe manufacturers, scrap yards and steel mills. The potential exists for chemical impacts to soil and groundwater from past operations at these facilities.
- A potential wetlands area is located immediately adjacent to the property along the western, northwestern and southwestern border.

The findings and conclusions made as part of this project report are not to be construed as legal advice. No environmental investigation can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Further, there is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions.



Quality Environmental Professionals, Inc. was contracted by the Gary/Chicago International Airport Authority, to conduct a Phase I ESA on the former Conservation Chemical Company of Illinois property located at 6500 Industrial Highway in Gary, Indiana, herein referred to as the "site." The site consists of 4.1 acres of land containing one maintenance storage building. Qepi understands that the site is in the process of being redeveloped as part of the Gary/Chicago International Airport's runway extension, therefore the Gary/Chicago International Airport Authority has requested this Phase I ESA. This document is prepared for the sole use of the Gary/Chicago International Airport Authority and is a document upon which they may rely.

This assessment was conducted for the purpose of evaluating business environmental risk relative to the site. Qepi's efforts were also conducted in recognition of the "due diligence" clause of Section 107 of CERCLA of 1980, as amended by the Superfund Amendment Reauthorization Act (SARA) in 1986, which has become key to managing the potential risk(s) presented by property transactions. Section 107(b) provides relief from liability if a property owner can establish that due care was exercised with respect to investigating a site for hazardous substances, and that precautions were taken against foreseeable acts or omissions in the transaction. The United States Environmental Protection Agency (USEPA) has recently finalized new language on "all appropriate inquiry" which became effective in November 2006.

The purpose of this Phase I ESA is to assist the Gary/Chicago International Airport Authority in establishing "due diligence" with regard to real estate transactions. The main objective was to determine the potential presence or absence of chemical impacts in the form of hazardous substances. Hazardous substances, in this case, refer to those materials defined in the Resource Conservation and Recovery Act (RCRA) and CERCLA regulatory programs and petroleum products. Such an assessment produces professional observations and conclusions, which are used to judge the likelihood of significant environmental issues existing currently or in the past that present potential environmental liabilities to the owners/operators of the property. These are referred to as Recognized Environmental Conditions (RECs). If impacts are found onsite that can be attributed to the activities of an off-site source(s), the responsibility for the impacts are generally the off-site parties. However, it would be prudent to seek legal advice and/or conduct further investigation regarding impact issues due to off-site sources.

Qepi's approach to Phase I ESAs generally focuses on the efforts in the tasks described below, conducted in accordance with ASTM standards, published May 1993 and updated in 2005. In general, the scope of work consisted of:

- Compilation of a history of site development and use with emphasis on any chemical substances which might have been onsite that could have contributed to a REC;
- Review of local, state and federal environmental regulatory documents to determine the applicability (presence/absence) of environmental issues such as: storm water, wastewater, groundwater, wetlands, storage tanks (underground and aboveground), spills, polychlorinated biphenyls (PCBs), air emission sources, asbestos, etc.;
- Visual observation of the property to detect indications of the presence of hazardous substances and RECs; and



- Reporting conclusions and recommendations.

This Phase I ESA Scope of Work did not include the sampling or analysis of environmental media. Generally, a Phase II ESA is developed in an effort to detect the presence or confirm the absence of environmental impacts.

2.1 Site Description

The subject property was located at 6500 Industrial Highway in Gary, Indiana. The site is roughly triangular in shape and bounded to the north and east by the Western Scrap facility, to the south by the Elgin, Joliet and Eastern Railroad and the main runway of the Gary/Chicago International Airport and to the west by undeveloped land. The site is located directly north of the Gary/Chicago International Airport, situated between Lake Michigan and the Grand Calumet River in Gary, Indiana. The subject property is located in the northeast quarter of Section 35, Township 37 North, and Range 9 West in Lake County, Indiana. The site is represented on Figure 1 on the United States Geological Survey (USGS) 7.5 Minute Topographic Map of the Highland, Indiana Quadrangle. On June 15, 2007, Mr. Nivas R. Vijay, Project Manager with Qepi walked the site and performed a site reconnaissance of the surrounding area. Photographs of the site taken by Mr. Vijay on June 15, 2007 are provided in Appendix A. It should be noted that Qepi presumed that the subject site property boundaries were defined by the fencing surrounding the property.

The site consists of a vacant parcel of land with overgrowth vegetation and sections of abandoned concrete pads and drainage ditches on 4.1-acres. A small, steel frame maintenance shed is located on the northern edge of the site. A 5,000-gallon AST was observed adjacent to the shed to the north. The site is roughly triangular in shape, with dimensions of approximately 560 feet north to south by approximately 430 feet south to northeast by approximately 325 feet northeast to north. A gravel parking lot is located adjacent to the maintenance building. The site can be accessed via one unpaved entrance into the northeast gate extending off of Industrial Highway. A six foot chain link fence surrounds the property on all sides along the property boundary.

2.2 Physical Setting

According to the USGS topographic map, the topography of the site is relatively flat with an elevation of approximately 590 feet above mean sea level (amsl). The site is located in the Calumet Lacustrine Plain Physiographic Region. The site is located in the Lake Michigan Basin (INDNR, 1987). The area is characterized by beach ridges, dunes and interrIDGE marshes. Surficial deposits are predominately sand and gravel. Most of the surficial material was deposited during Wisconsinan and pre-Wisconsinan Glaciation.

The predominate soils types in the project site area are Oakville-Tawas association soils consisting of steep, nearly level, very poorly drained and excessively drained and coarse textured to moderately coarse textured soils. These soils are developed in organic materials and in sandy mineral soil materials (Benton, 1977). The Oakville series found at the site consists of deep, excessively-drained soils formed in sandy dunes and beach ridges. Permeability is very rapid and it has a low available water capacity. Organic matter content is high in the surface layer. Runoff is slow. Slope ranges from 0 to 6 percent (Benton, 1977). Unconsolidated deposits in the vicinity of the subject site are approximately 150 feet thick (Gray, 1983).

Underlying bedrock is the Devonian Muscatatuck Group overlapping and truncating the Silurian Niagaran Salamonie Dolomite (Gray, Ault, and Keller, 1987). The Muscatatuck Group



2.0 Physical Description

(Continued)

predominately consists of beds of dolomite and sandy dolomitic quartz sandstone. The Salamonie Dolomite consists of beds dolomite and chert-rich limestone. (Shaver, et al, 1986). The bedrock surface underlying the site slopes to the southeast (Gray, 1982).

Based upon area topography, surface drainage in the area of the site is most likely towards the south and east. Surficial drainage is likely towards drainage ditches adjacent to the site created during the construction of the railroad to the south and during various stages of remedial activity. Remedial activity has included the removal of both surface and subsurface soils and the re-grading of the site. Previously conducted investigations determined groundwater flow to the south-southeast, which was based on survey data collected from previously installed groundwater monitoring wells. Regional groundwater flow direction in the area of the site is most likely south towards the Grand Calumet River (Beaty and Clendenon, 1987). Please note that the determination of groundwater flow is not within the Scope of Work of a Phase I report. Previously conducted investigations are further discussed in Section 4.5 below.

In order to gain an understanding of the site's historical use and development, the site was visually inspected, and aerial photographs and historical references were reviewed. The following section details the available information regarding the development of the site.

3.1 Historical Site Usage

On June 15, 2007, Qepi personnel conducted a site reconnaissance of the property. Qepi met with Mr. Jeff Rhinefield, Project Manager with Environmental Quality Management, at the site. Environmental Quality Management is currently under contract with the United States Environmental Protection Agency (US EPA) to operate the groundwater remediation system at the site. Mr. Rhinefield was interviewed during the site walk through in order to gain information concerning the current and historical use of the site. According to interviews and historical documents reviewed, the property was originally developed in the late 1900's for industrial usage. The site began operation as Johnson Oil Refinery and Service Station in 1952. The site operated as the Johnson Oil Refinery from 1952 to 1959 when it began operation as Berry Asphalt Company, an asphalt manufacturer and oil company. The company abandoned its asphalt operations in 1962 but continued operation as the Berry Oil Company Petroleum Refinery, a petroleum refining facility. The site operated as Berry Oil Company Petroleum Refinery from 1962 to at least 1966, when it ceased operation. The site was purchased by the Conservation Chemical Company of Illinois in 1967 and began operation as Conservation Chemical Company. Tanks, drums and other containments previously utilized and abandoned by the Berry Oil Company Petroleum Refinery were utilized by Conservation Chemical Company. The Conservation Chemical facility operated as a converter of industrial waste, primarily spent acids and solvents. The facility converted these wastes into forms acceptable for disposal or reuse. The site historically stored and treated spent acids, oils, solvents and scrap metals. In addition to these operations, the site historically produced ferric chloride to manufacture iron salt coagulants. Ferric chloride was produced by the treatment of spent ferrous chloride pickle liquor, imported from local steel mills, and scrap metal with imported chlorine gas. The facility primarily conducted these operations from 1967 to 1975 and from 1980 to 1985. From 1975 to 1980, the facility operated as a hazardous waste terminal and treatment facility. Cyanide, organic solvents, plating wastes and waste oil were treated, primarily through waste neutralization, and disposed of or stored onsite. The inability to comply with federal hazardous waste transporting regulations forced the facility to cease hazardous waste operations and reinstate ferric chloride production operations. Failures to comply with federal regulations requiring the closure of surface impoundments subsequently lead to the final closure of the facility in December 1985. The site was deeded to the Gary/Chicago International Airport Authority in 2001. The site has remained vacant since December 1985. Historical documents reviewed were obtained from the US EPA and the Indiana Department of Environmental Management (IDEM) and are further discussed in Section 4.0 below. Historical site photograph obtained by Qepi are provided in Appendix A.

Qepi reviewed historical aerial photographs provided by Environmental Data Resources, Inc. (EDR) dated 1958, 1965, 1973, 1987 and 1992. The 1958 aerial photograph depicted the site developed with numerous ASTs located throughout the southern and eastern extent of the facility, with a large building complex located along the northern boundary of the facility, directly north of the AST area. Three large ASTs were located along the northeast border of the property. Railroad

lines run directly to the west and south of the property with the western rail line branching off onto the southwest portion of the property. The western branch extends through approximately one-quarter of the property. The properties surrounding the site to the west and south beyond the rail lines appear undeveloped. A series of small buildings were located to the southeast of the subject property beyond the rail line. An airport runway was located further south of the property. The land to the northeast was undeveloped. The 1965 photograph reviewed depicts the property similar to the previously reviewed photograph. Several additional ASTs were located along the southern edge of the property directly south and adjacent to the three larger ASTs. Several small buildings and a scrap yard were present to the north and northeast of the property.

In the 1973 photograph reviewed, the majority of the ASTs previously present at the site have been removed, including the three large ASTs. The eastern portion of the facility has been decommissioned, with only outlines of the previously present AST pads and building present. The southwest portion of the facility appears similar to previous photographs, with the exception of the removal of three ASTs. The airport runway has been extended beyond the boundary between the site and the rail line to the south. The 1987 photograph reviewed depicts the site similar to that in the 1973 photograph. Structures previously present along the southeast border have been destroyed or removed. The ASTs previously present still remain. The airport runway appears further developed, similar to its appearance today. The property to the northeast has been further developed into a scrap yard, which extends further south and southwest to the location of the buildings located along the northern edge of the property. These buildings have been demolished or destroyed since the previous photograph, however the building imprints remain. Additionally, the rail line previously running along the western edge of the property is no longer present, nor is the branch line running onto the subject property. The 1992 photograph reviewed depicts the site similar to the previously reviewed photograph. The buildings along the northern edge of the property are no longer present; however the footprint of the building remains. No additional development appears in the surrounding properties.

The National Agriculture Imagery Program (NAIP) aerial photograph of the site dated 2005 and the United States Geological Survey (USGS) Quarter Quadrangle aerial photograph dated 1998 were reviewed on-line. The scale of these photographs is approximately 1 inch = 200 feet.

The aerial photograph reviewed from 1998 depicts the site similar to that reviewed in the 1992 photograph. The ASTs and above ground structures all remain in the same locations as before. The surrounding properties appear similarly developed. No additional development has occurred to the south or southeast involving the airport runway.

The aerial photograph reviewed from 2005 depicts the site similar to present day. The structures previously located on the property have been demolished or removed from the property. The entrance into the property is still present. Located immediately adjacent to the entrance on the northeastern border of the property is a small building with an AST located adjacent to the building to the northeast. The surrounding properties exist similar as before. A small rectangular concrete landing pad is now present at the northern end of the airport runway. A new building associated with the runway appears further east of the subject site, with a new addition of the runway running to the new building. Copies of the historical aerial photographs along with the 1998 and 2005 aerial

photographs are provided in Appendix B.

Qepi conducted a property title records search at the Lake County Auditor's Office and the Lake County Recorder's Office in Crown Point, Indiana to determine the ownership of the property. The current owners of the site are listed as the Gary/Chicago International Airport Authority according to the Indiana Commercial Property Record Card obtained from the auditor's office. According to the property record cards reviewed, title records could be definitively traced back to 1967. The list of owners and available transfer dates are provided in Table 1 below. A copy of the Indiana Commercial Property Record Card is provided in Appendix C. This title records search was not intended as a legal title search.

Table 1 Title Search Former Conservation Chemical Company 6500 Industrial Highway Gary, Indiana 46406	
Owner	Date of Ownership
Gary/Chicago International Airport Authority	04/03/2001 - Present
Lake County Board Of Commissioners	04/03/2001
Conservation Chemical Company of Illinois	10/27/1967 – 04/03/2001
Leonard Refineries, Inc.	Prior to 10/27/1967

It should be noted that historical maps and files searched by Qepi indicated that prior to ownership by Leonard Refineries, Inc., the site was owned by The Gary Land Company, The United States Steel Corporation, and The United States Department of Defense. Maps indicate the site was owned by these parties in varying time spans dating as early as 1907 through at least 1934. Neither exact transfer dates, nor a complete list of site owners could be compiled due to data gaps present at the Lake County Auditor's office.

Additionally, city directory listings were reviewed for the site address and surrounding properties by EDR on June 01, 2007 and by Qepi at the Gary Public Library on July 16, 2007. A summary of the pertinent listings are included in Table 2 below.

Table 2 Haines Criss -Cross and Polk City Directories Former Conservation Chemical Company 6500 Industrial Highway Gary, Indiana 46406	
Directory Year	Listing & Street Number
1920	2901 South Main Street – Address Not Listed* * South Main Street not developed south of 2700 block

Table 2 Haines Criss -Cross and Polk City Directories Former Conservation Chemical Company 6500 Industrial Highway Gary, Indiana 46406	
Directory Year	Listing & Street Number
1930	2901 South Main Street – Address Not Listed* 2822 South Main Street – Residential 2829 South Main Street – Residential * South Main Street not developed south of 2800 block
1931	2901 South Main Street – Edwards Iron Works 2822 South Main Street – Residential 2829 South Main Street – Residential
1936	2901 South Main Street – Edwards Iron Works 2822 South Main Street – Residential 2829 South Main Street – Residential
1945	2901 South Main Street – Edwards Iron Works 2822 South Main Street – Residential 2829 South Main Street – Residential
1934	STREET NOT LISTED (No listings for addresses located on US Route 12 (former name of Industrial Highway))
1937	STREET NOT LISTED (No listings for addresses located on US Route 12 (former name of Industrial Highway))
1945	NO LISTINGS FOR ADDRESSES LOCATED ON INDUSTRIAL HIGHWAY
1948	NO LISTINGS FOR ADDRESSES LOCATED ON INDUSTRIAL HIGHWAY
1952	SW Corner Industrial Highway – Johnson Oil Supply Company Service Station and Refinery W of SW Corner Industrial Highway – Young & Greenwalt Co. (Concrete Pipe Makers)
1959	SW Corner Industrial Highway – Berry Asphalt Company W of SW Corner Industrial Highway – Young & Greenwalt Co. (Concrete Pipe Makers) NW Corner Industrial Highway – Campbell Service Station 6401 Industrial Highway – Whizz-Gas Inc. Service Station
1962	SW Corner Industrial Highway – Berry Oil Refinery Company W of SW Corner Industrial Highway – Young & Greenwalt Co. (Pipe Makers) 6415 Industrial Highway – Whizz-Gas Inc. Service Station
1964-65	6321 Industrial Highway – Berry Oil Refinery Company W of SW Corner Industrial Highway – Young & Greenwalt Co. (Pipe Makers) 6415 Industrial Highway – Whizz-Gas Inc. Service Station
1966	6321 Industrial Highway – Vacant W of SW Corner Industrial Highway – Young & Greenwalt Co. (Pipe Makers) 6415 Industrial Highway – Whizz-Gas Inc. Service Station

Table 2 Haines Criss -Cross and Polk City Directories Former Conservation Chemical Company 6500 Industrial Highway Gary, Indiana 46406	
Directory Year	Listing & Street Number
1967	6321 Industrial Highway – Vacant W of SW Corner Industrial Highway – Young & Greenwalt Co. (Pipe Makers) 6415 Industrial Highway – Vacant 6500 Industrial Highway – Conservation Chemical Company
1972	6321 Industrial Highway – Vacant 6415 Industrial Highway – Go-Tane Service Station 6500 Industrial Highway – Conservation Chemical Company
1977	6321 Industrial Highway – Vacant 6415 Industrial Highway – Go-Tane Service Station 6500 Industrial Highway – Conservation Chemical Company Indiana Trucking Company
1981	6400 Industrial Highway – The Zack Company 6415 Industrial Highway – Not Listed 6500 Industrial Highway – Conservation Chemical Company Indiana Trucking Company
1985	6400 Industrial Highway – Griffith Ready Mix 6415 Industrial Highway – Not Listed 6500 Industrial Highway – Conservation Chemical Company Indiana Trucking Company
1987	6400 Industrial Highway – Brennan Steel, Inc 6415 Industrial Highway – Not Listed 6500 Industrial Highway – Conservation Chemical Company Indiana Trucking Company PEI Associates, Inc
1988	6400 Industrial Highway – Brennan Steel, Inc 6415 Industrial Highway – Not Listed 6500 Industrial Highway – Indiana Trucking, Inc MaeCorp, Inc
1992	6400 Industrial Highway – Brennan Steel, Inc 6500 Industrial Highway – Fruehauf Trailers
1997	6400 Industrial Highway – PGI Associates 6500 Industrial Highway – Swift Transportation, Inc
2002	6400 Industrial Highway – Lofland Midwest 6500 Industrial Highway – Swift Transportation, Inc
2005	6400 Industrial Highway – Bank Of Commerce 6450 Industrial Highway – Illini State Trucking 6499 Industrial Highway – Environmental Quality Management* 6500 Industrial Highway – Swift Transportation, Inc

Table 2 Haines Criss -Cross and Polk City Directories Former Conservation Chemical Company 6500 Industrial Highway Gary, Indiana 46406	
Directory Year	Listing & Street Number
* Note Environmental Quality Management likely represents maintenance shed currently located on the subject site	

The city directory review indicated that the property was occupied by Johnson Oil Supply Company from at least 1952 to 1959. The site operated as the Berry Asphalt Company from 1959 to 1962 and then operated as the Berry Oil Refining Company from 1962 to 1966. The site was vacant from 1966 to 1967. The site was operated as the Conservation Chemical Company from at least 1967 to 1987. The site has been vacant since 1987. It should be noted that varying address information exists for the parcel. The site likely shared a common address with neighboring businesses, which continued to operate at the same address after operations ceased at the subject site. The properties surrounding the site have been industrial, with petroleum service stations, concrete and metal pipe manufacturing facilities and transportation facilities located near the subject site. The historical listing of businesses at the subject site poses a REC for the site. Additionally, the historical listing of businesses adjacent to the site appears to pose a BER for the site.

Qepi obtained a Sanborn Fire Insurance Map dated 1945 from the Saint Joseph County Public Library Local History and Genealogy Online Digital Sanborn Map Database. The Sanborn Map depicted no development on the subject site. The Elgin, Joliet and Eastern Railroad is shown bordering the site to the south and southeast. No development is depicted to the south or southeast of the site. Further north of the subject site, beyond United States Highway 12 (presently Industrial Highway), railroad infrastructure is shown throughout a large tract of land identified as "Plants of the Carnegie-Illinois Steel Corporation." It is likely that manufacturing facilities associated with this steel corporation were present at this time in these locations (north and north east of the subject site); however the Sanborn Map reviewed depicts no structures on the land. Copies of the Sanborn Maps reviewed are provided in Appendix D.

3.2 Current/Future Site Usage

The property consists of 4.1-acres of land containing one maintenance building. The building is currently used in the operation of a groundwater remediation system onsite. The site is currently not connected to public utilities; however, the surrounding area is provided with city water and city sanitary sewer service. Electricity is provided by the city and natural gas is provided by NIPSCO.

Qepi understands that the Gary/Chicago International Airport intends on utilizing this property as part of the airport's runway extension project; and therefore the Gary/Chicago International Airport Authority has requested this Phase I ESA. A greater than 10% difference between the proposed purchase price and the replacement cost typically indicates a potential impairment of



the property. Based on the current status of the property, this distinction is not applicable to the subject site.

3.3 Adjacent Property Usage

The site was located directly north of the main runway of the Gary/Chicago International Airport in an industrial area in Gary, Indiana. The site is bordered to the north and east by Western Scrap, an industrial scrap yard and to the west by undeveloped land. The site is bordered to the south by Elgin, Joliet and Eastern (EJ&E) Railroad and the airport runway further south of the railroad.

The following subsections document the findings of the regulatory records review. To determine the history of the area and to investigate possible off-site concerns, an EDR Radius Map Report was reviewed by Qepi. A copy of the EDR Report is provided in Appendix E. Additionally, Qepi searched the Indiana Department of Environmental Management (IDEM) and the United States Environmental Protection Agency (US EPA) Region V Superfund Public Records databases to confirm the current regulatory status of the site and adjacent properties.

4.1 Federal

4.1.1 CERCLA/CERCLIS Sites

The US EPA maintains a list of sites that have been investigated or are currently under investigation for a release or threatened release of hazardous substances pursuant to the CERCLA of 1980. This list is designated as the US EPA's CERCLIS.

The subject site was listed on the CERCLA/CERCLIS list dated April 27, 2007. No other facilities were located on this database within a 1.0-mile radius of the site. The subject site is summarized below in Table 3.

Table 3 Former Conservation Chemical Company of Illinois 6500 Industrial Highway Gary, Indiana 46406 CERCLIS Facilities			
CERCLIS Facility	EPA ID #	Status	Location from Site *
Conservation Chemical Company 6500 Industrial Highway	IND040888992	Active, Clean Up Action Ongoing	Subject Site
*The gradient notation is based on surficial drainage, as determined by US Geological Survey Maps.			

A further review of the IDEM database detailed numerous site assessments conducted by the US EPA subsequent site clean up actions conducted at the facility. These clean up actions are further discussed in Section 4.5 below.

In addition to this CERCLIS facility, five additional facilities were identified on the CERCLIS No Further Action Planned (NFRAP) list dated May 25, 2007. These five additional facilities are summarized below in Table 4.

Table 4 Former Conservation Chemical Company of Illinois 6500 Industrial Highway Gary, Indiana 46406 CERCLIS NFRAP Facilities			
CERCLIS Facility	Facility ID #	Status	Location from Site *
Western Scrap Corp. 6901 West Chicago Avenue	0501563	NFRAP	<0.125 northwest/crossgradient
Luria Brothers & Company Inc. 6633 West Industrial Highway	0501564	NFRAP	<0.125 mile northwest/crossgradient
Roland Dump Site #73 East of Industrial Highway	0501614	NFRAP	0.25 - 0.50 mile northeast/crossgradient
Calumet Industries 6010 West Industrial Highway	0501366	NFRAP	0.25 - 0.50 mile southeast/crossgradient
Gary Regional Airport 6001 West Industrial Highway	0501484	NFRAP	0.25 - 0.50 mile southeast/crossgradient
Western Scrap Corp. 6901 West Chicago Avenue	0501563	NFRAP	<0.125 northwest/crossgradient
NFRAP: No Further Remedial Action Planned *The gradient notation is based on surficial drainage, as determined by US Geological Survey Maps.			

Documents obtained from the IDEM file room detailed CERCLIS Removal Action activities at the Western Scrap Facility, occurring from May 1986 to March 1989. The removal actions conducted at the facility included the removal of 240 55-gallon drums of hazardous solids and liquids, 65 5-gallon pails and hazardous and non-hazardous solids and liquids, removal of hazardous materials from two abandoned tankers and excavation of impacted soils. The materials removed included cyanides, solvents and waste oils. The site received a NFRAP designation in December 1990. A copy of the On-Scene Coordinator's report documenting CERCLIS removal action is provided in Appendix F.

4.1.2 USEPA National Priority List (NPL)

The National Priority List (NPL) is the USEPA database of uncontrolled or abandoned hazardous waste sites identified for priority remedial action. In order for a site to have NPL status, it must either meet or surpass a predetermined hazard ranking systems score, or be chosen as a state's top-priority site, or meet all three of the following criteria:

1. The USEPA issues a health advisory recommending that people be removed from the site to avoid exposure.
2. The USEPA determines that the site represents a significant threat.

3. The USEPA determines that remedial action is more cost-effective than removal action.

One facility was identified on the NPL database dated March 12, 2007 located within a 1.0-mile radius of the site. This facility was identified as the Midwest Solvent Recovery Company Incorporated, or MidCo II, located at 5900 Industrial Highway. MidCo II formerly conducted solvent recycling and industrial waste disposal operations. The USEPA conducted removal operations of drums, hazardous materials and impacted soils in 1985 and have conducted remedial investigations at the site since. The site is currently listed as being in its final stages of NPL listing.

4.1.3 Solid & Hazardous Waste/RCRA

RCRA was enacted as public law #94580 in 1976 as an amendment to the Solid Waste Disposal Act (SWDA), which provides for the "cradle to grave" tracking of hazardous waste. This Act monitors those facilities that generate, transport, treat, store or dispose of hazardous waste. Among the compliance issues brought about by RCRA are: record keeping, manifesting, protecting groundwater, preparing contingency and emergency action plans, developing closure and post closure standards, and ensuring financial responsibility.

The USEPA RCRA Notification list was reviewed for treatment, storage and disposal facilities (TSDF) located within a 0.5-mile radius of the site and generator and transporter facilities located adjacent to the site. One facility was listed within the specified radius on this database dated August 23, 2006. This facility is summarized in Table 5 below.

Table 5 Former Conservation Chemical Company of Illinois 6500 Industrial Highway Gary, Indiana 46406 Registered RCRA TSDF Facilities			
Registered RCRA Facility	RCRA ID #	Status	Location from Site*
Gary Regional Airport 6001 West Industrial Highway	INR000005199	Violations Exist**	0.25 – 0.50 mile southeast/crossgradient
* The gradient notation is based on surficial drainage, as determined by US Geological Survey Maps ** Violations appear related to documentation			

Additionally, the RCRA Notification list was reviewed for generators within a 0.25-mile radius of the site. A total of 4 facilities, including the subject site, within the specified radius were listed on the generator database dated August 23, 2006. These facilities are summarized in Table 6 below.

Table 6 Former Conservation Chemical Company of Illinois 6500 Industrial Highway Gary, Indiana 46406 Registered RCRA Facilities			
Registered RCRA Facility	RCRA ID #	Generator (Status)	Location from Site *
Conservation Chemical Company 6500 Industrial Highway	IND040888992	SQG/Violations Found	Subject Site
Lake County Board of Commissioners ¼ Mile East of Highway 12 and State Road 312	INR000011346	SQG/No Violations Found**	<0.125 mile northwest/crossgradient
OSI Environmental Inc. 6980 Chicago Avenue	IND984899740	SQG/No Violations Found	0.125 – 0.25 mile northwest/crossgradient
Luria Brothers and Company Inc. 6633 West Industrial Highway	IND095264818	SQG/Violations Found**	<0.125 – 0.25 mile northwest/crossgradient
SQG: Small Quantity Generator *The gradient notation is based on surficial drainage, as determined by US Geological Survey Maps. **Violations appear related to documentation			

According to information contained in the EDR report, the subject site recorded nine violations as a RCRA SQG. The violations cited failure of groundwater monitoring and financial responsibility requirements. Both formal and informal written notices and referrals were sent as part of these violations.

In addition to the above listed databases, the Corrective Action Report database dated December 13, 2006 was reviewed for hazardous waste handling facilities with reported RCRA corrective action activity within a 1.0-mile radius of the site. Three facilities, in addition to the subject site, within the specified radius were listed on the Corrective Action Report database. These facilities are summarized in Table 7 below.

Table 7 Former Conservation Chemical Company of Illinois 6500 Industrial Highway Gary, Indiana 46406 Corrective Action Report Facility Summary			
Facility	Address	CORRACTS Identification Number	Location from Site*
Conservation Chemical Company	6500 Industrial Highway	IND040888992	Subject Site
Luria Brothers and Company Inc.	6633 West Industrial Highway	IND095264818	0.125 – 0.25 mile northwest/ crossgradient
Citco Petroleum	2500 East Chicago Avenue	IND095267381	0.50 – 1.0 mile west/crossgradient

Table 7 Former Conservation Chemical Company of Illinois 6500 Industrial Highway Gary, Indiana 46406 Corrective Action Report Facility Summary			
Facility	Address	CORRACTS Identification Number	Location from Site*
Company			
Gary Dev Co. Inc	479 North Cline Avenue	IND077005916	0.50 – 1.0 mile southwest/crossgradient
* The gradient notation is based on surficial drainage, as determined by US Geological Survey Maps.			

According to the information provided in the EDR Report, these facilities have each been prioritized by RCRA and are currently in varying stages of corrective action.

According to the information provided in the EDR Report, the subject site appears to have undergone corrective action after a high priority RCRA designation, with corrective action currently ongoing. A remediation assessment was completed per RCRA requirements in December 1986. The site was prioritization in September 1991, with a high priority designation. Files gathered from the US EPA and from the IDEM file room further detailing site assessment and remedial activities are discussed in Section 4.5 below.

4.2 State

4.2.1 Underground Storage Tanks (USTs)

Owners and operators of UST systems which were in the ground on or after May 8, 1986, unless taken out of service on or before January 1, 1974, were required to notify the designated state or local agency of their existence in accordance with the Hazardous and Solid Waste Amendments of 1984, Publ. L. 48-616 (on a form published by the USEPA).

Owners and operators of USTs that were installed after December 1988 and contain more than 110 gallons of certain hazardous chemicals or petroleum products must be registered with IDEM and have corrosion protection, spill and overfill prevention and leak detection capabilities. All operating USTs, regardless of age, are now required to have corrosion protection and spill/overfill prevention. The EDR Report was reviewed for USTs within a 0.25-mile radius of the site on the database dated April 19, 2007.

The subject site was not listed on the UST Notification List; however, 5 facilities were listed with USTs located within the specified reporting radius of the site. These facilities with USTs are summarized in Table 8 below.

Table 8 Former Conservation Chemical Company of Illinois 6500 Industrial Highway Gary, Indiana 46406 UST Facility Summary			
UST Facility	Address	Facility Identification Number/Status	Location from Site*
Go-Tane Service Stations Inc.	6415 Industrial Highway	2125 / 4 Tanks Permanently Out of Service	<0.125 mile north/downgradient
P.I. & I Motor Express	7000 Chicago Avenue	16032 / 3 Tanks Permanently Out of Service	<0.125 – 0.25 mile northwest/crossgradient
Reichmann Enterprises Inc.	7200 Chicago Avenue	8151 / 2 Tanks Permanently Out of Service	<0.125 – 0.25 mile northwest/crossgradient
P G T Trucking Inc.	7212 Chicago Avenue	7935 / 4 Tanks Permanently Out Of Service	<0.25 – 0.50 mile northwest/crossgradient
Indiana Central Engine and Equipment	7330 West Chicago Avenue	4122 / 1 Tank Permanently Out of Service	<0.25 – 0.50 mile northwest/crossgradient
* The gradient notation is based on surficial drainage, as determined by US Geological Survey Maps.			

The USTs listed in the EDR report for off-site properties are not regarded as a REC for the site.

4.2.2 Leaking Underground Storage Tanks (LUSTs)

The EDR Report was reviewed for LUST incidents within the ASTM specified radius of 0.5-mile of the site on the database dated April 25, 2007. The subject site was not listed on the database; however, four facilities were listed with LUST incidents within a 0.5-mile radius of the site. These 5 facilities with LUST incidents are summarized in Table 9 below.

Table 9 Former Conservation Chemical Company of Illinois 6500 Industrial Highway Gary, Indiana 46406 LUST Facility Summary			
LUST Facility	Address	Incident Number Status / Priority	Location from Site*
P. I. & I Motor Express	7000 Chicago Avenue	199807530/Medium, Active (Soil and Groundwater)	<0.125 – 0.25 mile northwest/crossgradient

Table 9 Former Conservation Chemical Company of Illinois 6500 Industrial Highway Gary, Indiana 46406 LUST Facility Summary			
LUST Facility	Address	Incident Number Status / Priority	Location from Site*
Reichmann Enterprises	7200 Chicago Avenue	199501549/Medium, Active (Soil and Groundwater)	<0.125 – 0.25 mile northwest/crossgradient
P G T Trucking, Inc	7212 Chicago Avenue	199205513/Medium, Active (Soil and Groundwater)	<0.25 – 0.50 mile northwest/crossgradient
Correct Construction Inc.	6012 West Industrial Highway	199207530/Low, NFA – UST Branch Guidance (Soil)	<0.25 – 0.50 mile southeast/crossgradient
NFA = No Further Action * The gradient notation is based on surficial drainage, as determined by US Geological Survey Maps.			

4.2.3 Brownfields Sites

The EDR Report was reviewed for Brownfields sites within the ASTM specified radius of 0.5 mile of the site on the database dated April 25, 2007. Four facilities were listed as a Brownfields site within a 0.5-mile radius of the site. This facility is summarized in Table 10 below.

Table 10 Former Conservation Chemical Company of Illinois 6500 Industrial Highway Gary, Indiana 46406 Brownfields Facility Summary			
Brownfields Facility	Address	ACRES ID Status / Priority	Location from Site*
Western Scrap/Berry Oil	6500 Industrial Highway	4060016/Not Listed	<0.125 mile north/downgradient
Former Recover Inc.	6917 Industrial Highway	4060049/Not Listed	0.25 – 0.50 mile northwest/crossgradient
Refax Inc. (Property ADZ)	5934 – 6122 Industrial Highway	4990068/Not Listed	0.25 – 0.50 mile southeast/downgradient
Avenue Towing Property	5930 Industrial Highway	4990049/Not Listed	0.25 – 0.50 mile southeast/crossgradient
* The gradient notation is based on surficial drainage, as determined by US Geological Survey Maps.			

The Western Scrap/Berry Oil property is a former crude oil refinery currently operating as an industrial scrap yard. The property is located immediately adjacent to the site to the north and northeast. Berry Oil's previous operations encompassed the subject site until the facility ceased

operations in 1966. It is likely that petroleum impacts to soil and groundwater at the subject site date to the period when Berry Oil was in operation.

4.2.4 Environmental Spills

A spill is defined by 327 IAC 2-6 as "any unexpected or unapproved release of oil, hazardous, and/or objectionable substances, which enters or threatens to enter the waters of the state." According to the EDR report, there were reports of two spill incidents located on or adjacent to the site identified on the Indiana Spills/Emergency Response Notification System (ERNS) database dated April 25, 2007.

According to information provided in the EDR Report the first spill incident, incident number 200003070, dated March 08, 2000 was reported as a commercial diesel fuel spill affecting adjacent off-site ponds. The second spill incident, incident number 200203239, dated March 27, 2002 was reported as an individual spill of 550 gallons of unknown material. Further documentation regarding these spills was not identified; however it should be noted that the spills were identified in the EDR Report as 6500 Industrial Highway without mentioning Conservation Chemical. The potential exists for these spills to have been associated with the parcel of land adjacent to the subject site to the north.

Documentation of a spill of approximately 16,000 gallons of waste solvents from a leaking AST on December 22, 1981 was found in the review of files at the IDEM file room. The spill was contained in an area surrounding two tanks located on the northwest portion of the property. Soils were removed by hand tools from an 800 square foot area and on December 24, 1981, approximately 3,000 gallons of spilled liquids were pumped and transferred to an empty storage tank onsite for off-site disposal. Further excavation of impacted soils was conducted on December 26 and 27, 1981. A copy of the State Board of Health Spill Report is provided in Appendix G.

Prior investigations and site assessments conducted at the site have documented observations of numerous leaks and spills associated with chemical storage in ASTs and drums throughout the property. Stained soils and odors have been documented throughout the facility. Prior investigations and subsequent removal activities at the site are further discussed in Section 4.5 below. Based on historical data collected and reports reviewed, it is likely that numerous undocumented spills occurred at the property involving stored liquid and solid chemicals.

4.2.5 Solid Waste Facilities/Landfill Sites

The State of Indiana maintains a list of Solid Waste Facilities and Landfill Sites. Neither the site nor properties located within a 0.5-mile radius of the site were listed on the database dated February 13, 2007.

It should be noted that the subject site is located in an industrial area of Gary, Indiana, housing several scrap yards and former dumping facilities. While no facilities are listed in the state database as being solid waste facilities or landfill sites, at least one former dump facility has been identified within a 0.5-mile radius of the site. Historically, the properties immediately surrounding the subject

site have not been in operation as landfills; however a scrap yard is located immediately adjacent to the north and northeast of the site. Additionally, large amounts of concrete and industrial debris have been historically observed in the property immediately adjacent to the west of the site.

4.3 Local

On July 11, 2007, Mr. Vijay contacted the City of Gary Fire Department and requested records pertaining to any environmentally-related responses to the site. On July 11, 2007, a representative with the fire department responded, indicating that all environmentally related records are held with the City of Gary Office of Environmental Affairs and directed Qepi to contact this office.

On June 11, 2007, Mr. Vijay contacted the City of Gary Office of Environmental Affairs, requesting records pertaining to any environmentally-related responses to the site. Representatives from the Office of Environmental Affairs indicated that a review of files at the IDEM File Room would provide greater documentation related to the subject site. Copies of the Telephone Conversation Logs are provided in Appendix H.

4.4 Interviews

On June 15, 2007, Qepi personnel conducted a visual inspection of the property. Qepi met with Mr. Jeff Rhinefield, Project Manager with Environmental Quality Management, at the site. Mr. Rhinefield was interviewed during the site walk through in order to gain information concerning the historic and current use of the site. In addition, to Mr. Rhinefield, Mr. Steve Faryan with the US EPA was interviewed to gain information concerning historic and current remedial activities at the site. The results of these interviews are summarized throughout this report. In addition to these interviews, Mr. Robert Gyurko, Project Manager with the Gary/Chicago International Airport Authority, was contacted and provided with a copy of Qepi's Phase I ESA Questionnaire to complete. A copy of the Phase I ESA Questionnaire completed by Mr. Gyurko is included as Appendix I.

4.5 Previous Report Review

4.5.1 US EPA File Review

Qepi conducted a file review at the US EPA Region V Headquarters in Chicago, Illinois for all files pertaining to the subject site. Qepi reviewed the following documents obtained from the US EPA file room:

Havens and Emerson Consulting Environmental Engineers, *Hazardous Waste Assessment at Conservation Chemical Company Final Report*. October, 1983.

Ecology and Environment, Inc., *Preliminary Sampling Investigation*. May 14, 1984.

Weston-Sper., *Site Assessment for Conservation Chemical*. February 1985.

Weston-Sper., *Emergency Action Plan for Conservation Chemical*. May 1985.



4.0 Public Records Review

(Continued)

Enviresponse, Inc., *Priority Pollutant and RCRA Analysis Report*. November 22, 1985.

International Technology Corporation, *Site Action Plan Volume 1 & 2*. March 12, 1987.

Ecology and Environment, Inc., *Preliminary Site Assessment Executive Summary Report*. October 2, 1991.

Ecology and Environment, Inc., *Site Assessment and Removal Action Plan Volumes 1 & 2*. February 2, 1994.

Ecology and Environment, Inc., *Geoprobe and Groundwater Assessment Report*. July 5, 1994.

United States Environmental Protection Agency, *Action Memorandum*. February 21, 1997.

Krikau, Pyles, Rysiewicz and Associates, Inc., *Conservation Chemical Company of Illinois Final Report*. January, 2002.

United States Environmental Protection Agency, *Final Pollution Report (POLREP)*. April 18, 2003.

These reports detail site assessment and clean up activities that have taken place at the subject site from 1983 through 2003. The Havens and Emerson (HE) *Hazardous Waste Assessment Report* was completed for the Gary Municipal Airport Authority to determine cost and feasibility of remediation relative to the proposed acquisition of the property by the airport by expansion. The report detailed chemical and wastes stored on site based on site inspections and review of company inventories. The report also offered the airport remedial recommendations based on the site inspection and limited soil and groundwater sampling. Based on the report, HE concluded the following:

- The "pie-shaped basin", approximately 90 square feet of land located at the southern edge of the site had historically been utilized for disposal of waste oils and solids from the neutralization of steel pickling liquor. Potentially buried reactive waste and putrescible organic solids could be present as deep as 6 feet below ground surface. Small gas "eruptions" have been noted in this area. These eruptions were described as gas releases, possibly occurring as the result of the reaction of these buried reactive wastes with groundwater. An estimated 600,000 gallons of refinery waste emulsions, neutralized pickling liquor waste and other uncharacterized hazardous waste was thought present within the basin.
- Acid impacted soils are present throughout the site. Conservation Chemical was in the process of pouring soda ash on soil in certain portions of the property to neutralize ponded surface water as necessary. Additional impacts to soil are likely present as a result of chemical spills associated with ferric chloride manufacturing activities, and leakage or spills of tanks and drums storing hazardous material or left over waste oils dating back to the time the site operated as a refinery. Buried abandoned piping may also contribute to impacts to soil onsite.
- Groundwater monitoring wells directly offsite were shown to be impacted with chlorinated organics, cyanide, phenols and heavy metals. Additionally, oil impacted groundwater monitoring wells are located onsite.
- Two concrete lined pits, three large tanks, 53 smaller tanks and approximately 300 drums were located onsite, which were previously known to contain, or contain hazardous

material. Based on inventories conducted by Conservation Chemical in 1981 and 1982, chemicals present at the property included copper, cyanide, waste acids, silica etch acid, hydrochloric acid pickling liquor, waste caustics, neutral acid sludge, fuel oil, oil-water sludge and solvents.

A copy of the HE report is provided in Appendix J.

The Ecology and Environment, Inc. (E&E) Preliminary Sampling Investigation Report was completed for the US EPA to determine course of action for the US EPA in establishing the necessity for enforcement response at the subject site. The investigation included the advancement of soil borings and the installation of six groundwater monitoring wells ranging in depths from 12 feet to 41 feet below ground surface. Groundwater sampling indicated the presence of non-priority pollutant hazardous acid compounds, base neutral compounds, volatile organic compounds, solvents, metals and petroleum constituents. Additionally surface water samples and surface sediment samples were collected with each exhibiting high chemical concentrations of metals and volatile organic compounds. A copy of E&E preliminary investigation report is provided in Appendix K.

The Weston-Sper (Weston) *Site Assessment Report* was completed for the US EPA to determine whether an emergency situation was present at the facility based on the presence of material posing imminent threat to human health and the environment.

The Weston Technical Assessment Team, along with the US EPA and a representative from Conservation Chemical Company conducted a site inspection of the facility in February 1985. An up to date inventory and an updated site map was provided to Weston by Conservation Chemical. Approximately 45 tanks and other containments along with 264 drums were inventoried as part of the technical assessment. Ferric chloride, hydrochloric acid, fuel oil, asphalt oil, waste oil, cyanide, solvents, waste acids, silica etch acid, chlorine, acid sludge, cyanide sludge, oil sludge and neutral acid sludge were found contained in the various containers. Weston also identified an acid waste "lagoon", an area of acid impacted soils located along the western edge of property.

Based on results of this inspection, it was determined that two primary areas of concern were present. Approximately 170,200 gallons of cyanide sludge material were present on the property, mostly stored in deteriorating tanks and other containers staged in close proximity to tanks containing various acids; intensifying the potential for a cyanide vapor release. Based on the presence of a shallow water table and extensive leakage and spillage of chemicals at the facility, a threat to groundwater is present with groundwater impacts previously documented. As a result of these concerns, the site was deemed as posing an imminent hazard to the environment and human health.

Weston subsequently prepared an Emergency Action Plan in May 1985, addressing AST storage of cyanide liquid waste, PCB-containing oils, neutralized acid wastes and organic solvents stored onsite.

Thirteen tanks were identified onsite as containing 147,321 gallons of liquid cyanide waste, most of

which had been stored onsite for at least ten years. The tanks which stored the cyanide were in a deteriorating condition. Information provided by Conservation Chemical indicated numerous spills and leaks had occurred at the property, each having been subsequently treated in-situ with an undisclosed hypochlorite solution. In addition to the liquid cyanide waste, 495,850 gallons of PCB-impacted material, stored in two deteriorating ASTs, was noted onsite along with 412,504 gallons of material labeled as "neutral acid waste," likely a byproduct from waste pickling liquor neutralization activities, stored in one deteriorating AST. 33,300 gallons of chlorinated hydrocarbon material, likely generated as solvents, was located in two deteriorating ASTs. Methylene chloride was the predominant chlorinated hydrocarbon identified within these ASTs. Remedial alternatives for the treatment and disposal of these wastes, along with cost estimates, were further discussed within the Weston Report.

A copy of the Weston site assessment report and emergency action plan is provided in Appendix L.

The International Technology Corporation (ITC) *Site Action Plan* was completed to provide details regarding the removal activities to be completed at the Conservation Chemical facility. According to the document, ITC was retained by the US EPA in October 1985 to prepare a site health and safety plan, a site fence plan and a site sampling plan. ITC implemented the fence plan, which included the construction of a fence surrounding the facility, in May 1986 and implemented the sampling plan, which included the collection of liquid and dreg samples from tanks identified in the Weston Emergency Action Plan as posing an imminent threat. Samples were collected from tanks containing liquid cyanide wastes, acid wastes and associated dreg material and sludge material. Based on sample results, ITC determined that cyanides and acids onsite could be chemically treated to render the material nontoxic, and that sludge material could be dewatered and/or solidified for disposal offsite. The report further detailed operating procedures that would be utilized to facilitate the treatment/removal of these materials and the subsequent decontamination of tanks and containments located at the site. A copy of the ITC site action plan report is provided in Appendix M.

E&E completed a *Preliminary Assessment Report*, directed by the US EPA, to determine to the need for further investigation at the site in 1991. Based on this report, E&E was directed to complete a new site assessment for the subject property. This document review contained photographs of the site taken in May 1991. These photographs are included in Appendix A.

As directed by the US EPA, E&E completed a *Site Assessment/Removal Action Plan* to develop a site health and safety plan, a sampling plan for tanks, drums, lagoons and soils onsite and to evaluate potential threats to human health and the environment present onsite. The E&E report provided a timeline of activities at the site. From June 1987 to February 1988, ITC conducted removal activities at the site as detailed in the previously reviewed site action plan. Removal activities conducted by ITC included the removal of 139,949 gallons of cyanide liquids, 285 drums of cyanide solids, 5,718 gallons of acid liquids, 45 drums of acid solids, 1,507 tons of chlorinated hydrocarbon solids and 48,000 gallons of tank filtrate. The tanks were stabilized and secured onsite after removal activities concluded.

In October 1989, a cracking tower onsite impacted with cyanide was dismantled, and cyanide

impacted waste was drummed and stored onsite. In January 1990, PCB impacted material was solidified utilizing 3,037 tons of lime and staged onsite. Throughout the course of 1990, additional wastes were removed during clean up activities conducted by Environmental Restoration Services. During this stage of clean up, 187,948 gallons of PCB-impacted liquids, 214.78 tons of PCB-impacted soils, 1,941 gallons of uncharacterized hazardous waste liquids, 60 tons of uncharacterized hazardous waste solids, 15,300 gallons of flammable waste liquids, 112 tons of flammable waste solids, 1,760 gallons of waste chromic acid, 2,960 tons of non-hazardous waste solids, 74 cubic yards of impacted debris and 51,600 pounds of silicon tetrachloride were removed from the site. In September 1990, the US EPA demobilized from the site.

In November 1993, an inspection was completed at the facility where numerous uncontrolled drums, tanks, scrap metal and stained soils were observed. Acts of vandalism in the form of broken windows and the removal of a large section of fencing was observed during the site inspection. In December 1993, an inspection was conducted at the facility to determine the number of drums and tanks, along with their corresponding volumes, remaining at the facility. Approximately 325 drums (175 containing product) and 50 tanks (11 containing material) were observed onsite along with empty containers having previously been decommissioned. Numerous piles of scrap metal and cut-up tanks were found throughout the site. Soil samples were collected from the acid lagoons/pits and in the PCB/lime waste pile. Samples were also collected from drums and tanks onsite. Analytical results revealed PCBs, volatile and semi-volatile organic compounds in the soil samples. In addition, an asbestos sample was collected from the exterior of a tank. Amosite asbestos was also detected in the asbestos sample detected.

Based on this inspection, it was determined by E&E and the US EPA that conditions present at the site still posed an imminent threat to human health and the environment; therefore time-critical removal action was justified at the site. Based on the findings of this report, the removal of 90,500 gallons of acid liquids, 25 cubic yards of acid solids, 52,500 gallons of caustic liquids, 45 drums of caustic solids, 35,000 gallons of flammable liquids, 10,000 cubic yards of chromium impacted soils, 130 drums of uncharacterized hazardous solids, 5,000 cubic yards of PCB/lime solids and the removal of asbestos containing material would be required at the site. Wastes present were located in deteriorating and/or open drums and tanks, and in open waste piles and lagoons. Furthermore, substances were observed leaking from the drums and tanks onto the surrounding grounds.

A copy of the E&E site action plan report is provided in Appendix N.

A US EPA Action Memorandum dated February 1997 was issued, which documented the determination of the imminent threat to human health and environment posed at the subject site. The determination was based on site assessment activities conducted in late 1993 and early 1994. The document was prepared to justify that removal action by the US EPA, based on the financial inability of IDEM and the City of Gary to complete the time-critical removal action. A copy of the US EPA Action Memorandum is provided in Appendix O.

A final report documenting time-critical removal actions was submitted to the US EPA by Krikau, Pyles, Rysiewicz and Associates, Inc. (KPR) dated January 2002. Based on this final report the following removal activities, deemed to be the final removal activities required at the site, were

completed by KPR from July 1, 1999 to August 23, 2000:

- A total of 59 tanks were inventoried, properly characterized, emptied, cleaned and removed offsite for scrap or disposal. The disposal of liquids within the tanks included the removal of 54,305 gallons of acid liquids, 35,368 gallons of alkaline liquids, 3,865 gallons of caustic liquids and 1,255 gallons of chromium/cadmium impacted liquid. The disposal of solids within the tanks included the removal of 24 cubic yards (1,600 gallons) of methylene chloride solids, 3 cubic yards of ferric chloride solids, 25.11 tons of trichloroethylene solids and 165 gallons of lead/chlordane solids. An additional 472.39 tons of non-hazardous petroleum impacted soil, 29.33 tons of non-hazardous refractory brick, 385 gallons of non-hazardous oily solids, 85 gallons of non-hazardous oil, 55 gallons of non-hazardous sludge and 660 gallons of PCB-impacted liquids were disposed of from the tanks.
- Two concrete lined basins and one unlined metal basin were encountered during the remedial activities. A total of 9,200 gallons of non-hazardous liquid and 4,180 gallons of hazardous liquids along with 584.52 tons of stabilized waste solids and 24 cubic yards of hazardous waste solids were removed from two of the basins. The third basin was deemed to contain non-hazardous material. The two concrete basins were cleaned and backfilled with imported aggregate material and leveled to grade. The metal basin was excavated and backfilled with imported aggregate material and leveled to grade.
- A total of 165 drums were ultimately encountered onsite. Numerous drums were empty or contained debris material. One hundred-thirteen of the drums encountered contained hazardous waste solids in the form of tetrachloroethane, toluene, trichloroethene and xylene. Thirty-eight of the drums contained hazardous waste liquids. The drums were segregated by waste stream and removed for disposal. Any drums deemed salvageable were crushed and removed off-site for scrap.

An additional subsurface investigation yielded a significant amount of buried drums and containers. These drums were excavated and staged for characterization. After characterization, these drums were shredded. A total of 111.18 tons of non-hazardous drum debris and 60 cubic yards of hazardous drum debris were removed for disposal.

- Five lab-packs containing small quantity containers of hazardous chemicals were found onsite during previous investigations. Variable amounts of flammable solids, flammable, corrosive, oxidizing and acid liquids and paints were removed for disposal.
- Of the three identified lagoons onsite, the "pie-shaped" lagoon was determined by sampling to contain hazardous sludge material. After the completion of a treatability study, the sludge material in all three lagoons were mechanically mixed with lime kiln dust and stabilized. The hazardous sludge was additionally treated with fly ash and ferric chloride for treatment to acceptable levels. The sludge material was staged onsite and capped with at least two feet of clay and three inches of topsoil. The lagoons were leveled back to grade with three-inch rock material.
- Asbestos containing material (ACM) in the form of pipe/equipment insulation, building materials and tank coatings were identified and abated.
- Additional soil test pits and soil borings were advanced to determine the extent of chemical impacts to soils in specific areas related to the location of the ASTs. Based on these tests, 152.82 tons of hazardous soil was excavated and disposed of. Groundwater monitoring

wells installed as a result of previous investigations were properly abandoned in accordance to IDEM regulations as part of this investigation.

- Additional work completed at the site included:
 - Demolition and removal of a wooden cooling tower, several buildings, tank supports, overhead piping, flatbed truck trailer and a tractor.
 - Excavation and removal of the railroad spur running through the southwest portion of the site.
 - Removal of non-hazardous garbage and debris.
 - Removal of salvageable scrap metal.
 - Removal of decontamination pad.
 - Removal of 100-125 discarded tires found onsite.

A containment barrier was also installed along the southeast border of the site as part of this work plan. The barrier was installed to control petroleum migration offsite. Based on site investigations, a drainage pipe was installed in a ditch at the north end of the runway located on the Gary/Chicago Airport property in lieu of the containment barrier. Approximately 1,120 linear feet of 36-inch diameter concrete pipe was installed, along with six clay checks to monitor for the presence of migrating oil. This also allows for the pumping and removal of any migrating oil that may be encountered.

A copy of the KPR Final Report is included in Appendix P.

The US EPA Final Pollution Report (POLREP) dated April 18, 2003 described the construction and start up of the water treatment system currently operating onsite. Based on the POLREP and the Environmental Quality Management (EQM) Operations and Maintenance Manual for the site, six extraction/recovery wells were installed to a depth of 35 feet below ground surface 10-inch diameter Schedule 80 PVC piping with 15 feet of PVC 0.10 slot screen. The recovery wells are designed to pump to a 1,000 gallon poly tank and an oil storage compartment. The oil storage compartment stores oil skimmed from the collected water and transports the oil to a 5,000 gallon storage tank adjacent to the system shed. Effluent water is released back into the ground to an inground stone filtration gallery. The 5,000 gallon storage tank is emptied semi-annually or as needed. A copy of the US EPA POLREP is provided in Appendix Q.

4.5.2 IDEM File Review

In addition to the files recovered at the US EPA Region V Headquarters, a file search was conducted at the IDEM File Room for all documents related to the subject site. Numerous documents were obtained at the IDEM File Room, of which a majority utilized previously reviewed documents obtained at the US EPA to relay data obtained to State authorities. These documents were generally dated from 1984 to 1999.

Numerous documents pertaining to clean up enforcement actions and industrial waste permit applications at the facility dating from early 1972 to 1977 were found. Photographs included with one of the waste permit applications submitted in March 1982 are included in Appendix A.



4.0 Public Records Review

(Continued)

Based on a review of these documents, it was determined that an agreed order was entered by Mr. Norman Hjerstad, President of Conservation Chemical Company and the State of Indiana on December 29, 1972 to address industrial waste issues at the site. The Agreed Order, Cause B-210, called for the following: 1) Neutralization and removal of all wastes and materials in lagoons and basins. 2) Filling of lagoons and basins with inert materials. 3) Disclosure of a monthly inventory of stored materials onsite. 4) Submissions of plans for a sanitary sewage treatment system, and 5) Completion of sewage treatment system installation. The Agreed Order also called on the company to cease the deposition of untreated liquids and other chemical wastes into the ground. Conservation Chemical routinely failed inspections in accordance with the Agreed Order based on the presence of oil on surface groundwater surrounding one tank and the presence of several thousand drums of various chemicals, several of which were noted to be leaking. Based on subsequent notices sent to Conservation Chemical Company, the Agreed Order was not complied with until September 1977. Drums, except those routinely utilized by the facility, were disposed of and "spilled" oil was deemed sufficiently removed from the surface waters. It should be noted that several of the documents within this file were faded or missing pages. The pages summarized reflect legible material obtained from the file room. A copy of the Agreed Order and subsequent letter of compliance is included in Appendix R.

Additional documents obtained from the IDEM File Room include internal memorandums and other correspondences amongst State of Indiana and either State Board of Health or IDEM staff in regards to the subject site. It should be noted that several documents were found in the file room under the heading of Swift Transportation, Inc., the current listed owner of the property addressed at 6500 Industrial Highway in Gary, Indiana. These documents generally included duplicates of those files uncovered under the Conservation Chemical heading. The reports specifically referenced above are included as Appendices where noted. All other pertinent documents obtained are referred to throughout this report. Qepi has retained copies of all files pertaining to the subject site collected from both the US EPA and IDEM. Upon request, all files can be provided in digital format.

5.1 General Observations

On June 15, 2007, Mr. Nivas R. Vijay, Project Manager, with Qepi walked the site and performed a site reconnaissance of the surrounding area. Qepi met with Mr. Jeff Rhinefield, Project Manager with Environmental Quality Management, at the site. Mr. Rhinefield was interviewed during the site walk through in order to gain information concerning the current use of the site.

The site consists of a vacant parcel of land with overgrowth vegetation and sections of abandoned concrete pads and drainage ditches on 4.1-acres. A small, steel frame maintenance shed is located on the northern edge of the site. A 5,000-gallon AST was observed adjacent to the shed. The site is roughly triangular in shape, with dimensions of approximately 560 feet north to south along an off-site drainage ditch, by approximately 430 feet south to northeast along the Elgin, Joliet and Eastern Railroad and the Gary/Chicago Airport runway, by approximately 325 feet northeast to north, along the site boundary with the Western Scrap facility. A gravel covered parking lot is located adjacent to the maintenance building. The site can be accessed via one unpaved entrance into the northeast gate running off of Industrial Highway. A six foot chain link fence surrounded the property on all sides along the property boundary.

The site currently operates a groundwater pumping and treating system out of the maintenance shed. The 5,000-gallon AST is utilized by the system to store recovered oil from recovered groundwater. A 1,000-gallon AST is located within the system shed, along with an oil-water separator and an extraction well pump. The system is regularly maintained and in working condition.

5.2 Chemical & Waste Management

During the site reconnaissance several empty drums were noted onsite, which were used previously in the storage of purged groundwater collected during the sampling of groundwater monitoring wells present onsite. A 5,000-gallon AST was also located onsite, which is used in the operation of the groundwater remediation system operating onsite. A small tank and poly-tank were also noted onsite, also used in the operation and maintenance of the remediation system. Additional small quantities of stored chemicals were present in the remediation shed, utilized in the operation of the system. All chemicals currently found onsite were properly stored. Current on-site waste generation and stored chemicals onsite do not pose a REC for the site.

Previous chemical and waste generation and storage onsite are detailed in Sections 3.1 and 4.5 and throughout this Phase I ESA.

5.3 Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are hazardous substances once commonly used in electrical transformers, hydraulic equipment, capacitors, and other electrical equipment as nonflammable cooling oils. Since PCBs are uniquely stable and highly heat resistant, PCBs were used throughout the manufacturing and transportation industries as cooling fluids. In 1976, the Toxic Substances Control Act (TSCA) was passed to ban the manufacture of PCBs in order to limit PCB distribution

and control PCB disposal. The "final rule ban" (44 federal register 31514) later regulated all PCBs to 50 parts per million (ppm).

USEPA rule 40 CFR part 761 states in part that the owner of PCB contaminated equipment (i.e., electrical transformers) is responsible for any environmental liabilities caused by PCB contamination of the environment through leakage, fires, etc. If a transformer contains PCBs greater than 500 ppm, it is classified as a PCB-transformer. If PCB content is between 50 and 499 ppm, the transformer is classified as PCB-contaminated. However, if PCB content is unknown (untested by a laboratory), the transformer must be considered PCB-contaminated (50-499 ppm).

Electrical service poles were found located near the northern edge of the property. No transformers were found on the property. No evidence of any leaks or stains on the ground in the area of the electrical service poles was noted during the site reconnaissance. Current potential PCBs issues onsite do not appear to pose a REC at the site.

PCB-impacted liquids and solids are known to have been previously generated and stored onsite. Based on previously conducted investigations, PCB impacts to both soil and groundwater have been found throughout the site. Prior removal activities at the site have included the removal of PCB-impacted liquids and solids. PCB-impacted materials have previously been neutralized and stored onsite, prior to removal. Additional actions conducted have resulted in the removal of PCB-impacted surface soils; however, the potential for PCB-impacted subsurface soils and groundwater at the site remains.

5.4 Underground Storage Tanks

No readily observable evidence of USTs, such as fill pipes, etc., was noted during the site reconnaissance. No records of registered USTs were found during the EDR database search. The site operated numerous ASTs during its operations as an oil refinery and chemical waste handling facility. Previous reports reviewed indicate the presence of two concrete lined pits at the property, as well as the presence of lagoons and pits. Removal actions previously conducted included the removal of all materials from these lagoons and pits and the closure of these areas with filled in concrete. Materials known to be contained within these areas included acid liquids, acid solids, PCB-impacted oils, PCB/lime neutralized solids, fuel oils and waste oils. Pits and lagoons previously operated onsite are discussed in greater detail in Section 4.5.

5.5 Aboveground Storage Tanks

During the site reconnaissance, one 5,000-gallon AST was noted at the site, which is utilized in the operation of the on-site groundwater remediation system. The AST serves to store oil recovered from the remediation system. A smaller AST was also noted onsite, which is also used in the operation and maintenance of the remediation system. No leaks or stains were observed in the area surrounding the AST. Regular maintenance activities are documented regarding the emptying and cleaning of this AST.

Site research indicates that numerous ASTs were in service at the site throughout its operation from the early 1950's to the mid 1980's. These tanks were used in the storage of various oils and chemicals. ASTs onsite ranged in size from 2,400 to 1,500,000 gallons with the majority being 15,000 to 25,000 gallons in size. Prior site investigations conducted at the site detailed the deteriorating condition of several ASTs onsite. Leaking and staining of soil had also been observed in association with the ASTs. In removal activities conducted in late 1999 and early 2000, all previously existing ASTs were dismantled and either scrapped or disposed of offsite. The treatment and/or removal of stained/impacted soils immediately surrounding ASTs has occurred at the site during various stages of removal activity at the site. Further details regarding ASTs at the site are discussed in Section 4.5.

5.6 Asbestos

Asbestos is a fine, slender fibrous mineral that, due to its resistance to fire and most solvents, was widely used in floor tiles, ceiling tiles, roofing materials, and pipe insulation. In 1971, OSHA began to regulate asbestos, and beginning in 1979, asbestos was regulated by EPA as a hazardous material. Because of these regulations, asbestos is no longer used in most building materials.

At the time of the site reconnaissance, one maintenance building was located onsite, with no evidence of any ACM present within the structure. In the KPR *Final Report* dated January 2002, KPR details asbestos assessment and abatement activities conducted during site clean up activities in July 1999. During this site clean up, an asbestos assessment was completed to determine the presence of ACM in the ASTs and other above ground structures located at the site. The assessment revealed the presence of ACM in the form of pipe and equipment insulation, transite paneling and AST exterior coating. In activities conducted from August 23, 1999 to September 15, 1999, KPR completed an abatement of these materials prior to the dismantlement or demolition of the tanks or above ground structures with ACM. The abatement resulted in the removal of approximately 30 cubic yards of ACM, which was disposed of under proper manifest at the Newton County Landfill in Brook, Indiana. Based on this report and the current development on the property, asbestos containing material does not appear to be present at the site. An asbestos inspection was not requested as part of this Phase I ESA.

5.7 Lead in Paint & Water

Approximately three-quarters of the nation's homes and buildings built before 1978 contain some lead-based paint. When properly maintained and managed, this paint poses little risk. In June 1986, an amendment to the Safe Drinking Water Act was passed requiring that any repairs made to water piping subsequent to this date must use lead free (less than 0.2% lead) solder and fittings. More recently, EPA has set an action limit of 15 parts per billion (ppb) as a goal for drinking water supplies. Water from pipes which have lead solder or fittings may have elevated lead content through leaching, and pose a potential threat to individuals ingesting this water.

During the site reconnaissance, no areas of peeling paint were noted in or on the exterior of the on-site maintenance building. No evidence of soldered fittings were found that may lead to leaching of



lead content into groundwater. Due to the age of construction, the building is unlikely to contain lead based paint.

5.8 Wetlands

The U.S. Army Corps of Engineers classifies wetlands by three criteria: soil type, vegetation, and hydrology. Wetland soils are hydric with a high organic content that accommodates hydrophytes, plants that adapt to wet soils. The hydrology of the site determines ponding of water and duration of ponding. Wetland areas prevent soil erosion and provide flood control and, therefore, are protected by federal law.

The National Wetlands Inventory Map of the Highland, Indiana Quadrangle depicted wetlands immediately adjacent to the west, northwest and southwest of the subject site. A wetlands delineation survey is outside the scope of a Phase I ESA and was not requested nor conducted as part of this Phase I ESA. A copy of the wetlands map is included in Appendix S.

5.9 Radon

Radon is a natural pollutant formed by the disintegration of radium and is a heavy, colorless, odorless, radioactive gas. This gas, which occurs naturally in geologic formations containing uranium, granite, phosphate, and shale, is a lung cancer risk and may cause genetic damage. The USEPA published a survey stating that at least 20 percent of homes/buildings tested have levels higher than the suggested standard of 4 picocuries per liter (4 pCi/L).

Exposure to radon generally occurs in confined areas, most often in basements and crawl spaces. According to the EDR report, the area of the property under this assessment is located within the EPA Radon Zone 2. The levels of radon found indoors in Zone 2 are typically between 2 pCi/L and 4 pCi/L. Radon testing was not requested nor conducted as part of this environmental assessment.

5.10 Indiana Responsible Property Transfer Law (IRPTL)

In accordance with IC 13-25-3, defined in Section 6 of the Senate Enrolled Act 541, the State of Indiana requires the disclosure of environmental information in connection with the transfer of real estate property. In general, three primary types of properties require disclosure documents, as defined below.

1. Properties that report under Section 312 of the Emergency Planning and Community Right-to-Know Act (EPCRA).
2. Properties with underground storage tanks that report under 42 U.S.C. 6991a.
3. Properties on the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) list.



5.0 Site Observation & Findings

(Continued)

Based on information gathered, the site appears on the CERCLIS database with remedial activity currently ongoing. The site appears to meet the requirements specified under the IRPTL. It may be prudent to seek legal advice as to the site applicability under the IRPTL.



6.0 Conclusions & Recommendations

Qepi's conclusions and recommendations are based on information obtained through a review of regulatory agency records, historical aerial photographs, historical sources and on-site observations. The conclusions and recommendations from the Phase I Environmental Site Assessment are provided below. In the professional opinion of Qepi, an appropriate level of inquiry has been made into the previous ownership and uses of the property consistent with good commercial and customary practice in an effort to minimize liability.

Qepi has performed a Phase I ESA in general conformance with the scope and limitations of ASTM Practice E 1527-05 and the USEPA AAI Rule that was finalized on November 1, 2005 for the former Conservation Chemical Company of Illinois property, formerly located at 6500 Industrial Highway in Gary, Indiana. This assessment revealed the following Recognized Environmental Conditions (RECs) in connection with the property:

- The site historically operated as a converter of industrial waste, storing and treating spent acids, oils, solvents and scrap metals. In addition to these operations, the site historically produced ferric chloride to manufacture iron salt coagulants, utilized waste pickling liquor and chlorine gas along with scrap metal and waste acids. These operations took place from 1967 to 1975 and from 1980 to 1985. Removal activities at the site have documented the presence of stored cyanide solids and liquids, PCB-impacted solids and liquids, acid solids and liquids, caustic solids and liquids, waste oils, metal impacted solids and liquids, ferric chloride, chlorinated hydrocarbons and hazardous sludge onsite.

Potential impacts associated with these types of operations include cyanides, metals, solvents, polychlorinated biphenyls (PCBs), solvents, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs).

- From 1975 to 1980 the site operated as a hazardous waste terminal and treatment facility. Cyanide, organic solvents, plating wastes and waste oil were treated, primarily through waste neutralization, and disposed of or stored onsite. Removal activities at the site have documented the presence of stored cyanide solids and liquids, PCB-impacted solids and liquids, acid solids and liquids, caustic solids and liquids, waste oils, metal impacted solids and liquids and hazardous sludge onsite.

Potential impacts associated with these types of operations include cyanides, metals, solvents, PCBs, VOCs and SVOCs.

- The site historically operated as an oil refinery from at least 1952 to 1966. Historical data collected indicated that tanks and drums containing waste oils, fuel oil and impacted soils and sludge were contained onsite and reutilized in site operations conducted after the refinery closure. Currently the site is operating an oil recovery remediation system, which includes the pumping and treatment of free phase liquid oil product from the groundwater aquifer.

Potential impacts associated with this type of operation include petroleum hydrocarbons, metals, PCBs, VOCs and waste oils.

- The site historically had contained numerous above ground storage tanks (ASTs), several of which were utilized by both the refinery and the chemical company. Prior evaluations conducted at the site detailed the inventories and deteriorating condition of several of the tanks in operation. Additionally, leaks and spills associated with the tanks have been historically

6.0 *Conclusions & Recommendation*

(Continued)

recorded. Stained soil has been historically observed surrounding ASTs at the site. Tanks at the site have been known to store cyanide solids and liquids, PCB-impacted solids and liquids, acid solids and liquids, caustic solids and liquids, waste oils, metal impacted solids and liquids, ferric chloride, chlorinated hydrocarbons and hazardous sludge.

In addition to ASTs, numerous drums have been stored and buried onsite. Prior evaluations reported drums staged throughout the property, with a majority in a deteriorating condition. Over pack drums and leaking drums have been historically observed onsite. Drum contents have been noted to store cyanide liquids, PCB-impacted solids and liquids, acid solids and liquids, caustic solids, waste oils, ferric chloride, chlorinated hydrocarbons and hazardous sludge.

Potential impacts to soil and groundwater based on leakage and spillage of tanks and drums at the property are present.

In addition to the RECs, the following Business Environmental Risks (BERs) were noted.

- The site is located in a heavily industrialized area in Gary, Indiana. Businesses located adjacent to the subject site have included an oil refinery, petroleum service stations, concrete and metal pipe manufacturers, scrap yards and steel mills. The potential exists for chemical impacts to soil and groundwater from past operations at these facilities.
- A potential wetlands area is located immediately adjacent to the property along the western, northwestern and southwestern border.

The findings and conclusions made part of this project report are not to be construed as legal advice. No environmental investigation can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connections with a property. Furthermore, there is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions.

Qepi is not responsible for the identification of recognized environmental conditions that may be present outside the evaluated area. Qepi is not responsible for unrecorded data pertaining to the property, nor are we responsible for independent conclusions or opinions made by others of this report. Qepi makes no warranties, expressed or implied, as to fitness of this report for any particular purpose.



7.0 Report Disclaimer

This report was prepared in accordance with generally accepted principles and practices in the environmental consulting field. Conclusions and recommendations expressed herein were developed from site evaluation and limited research, and we are not responsible for unrecorded data pertaining to this site. Qepi makes no warranties, expressed or implied, as to the fitness or merchantability of said property for any particular purpose, and we are not responsible for independent conclusions or opinions made by others based on this report.

This report has been prepared for the exclusive use of the Gary/Chicago International Airport Authority for the expressed purpose of providing the Gary/Chicago International Airport Authority with an understanding of the potential impact from recognized environmental conditions at the assessed property. This report is solely for the use and information of our client unless otherwise noted. Any reliance on the report by a third party is at such party's sole risk. Qepi makes no recommendations in regards to the sale, purchase, lease, construction, or other improvements on the subject property.

It must be noted that even the most comprehensive scope of work may not detect environmental liability on a particular property. This report is not intended, nor does it claim to encompass every record, report, or document available on the site and surrounding properties. This report also reflects conditions observed during the time periods during which on-site visit(s) were conducted, and is limited to those conditions that were readily visible.

Qepi has relied upon information furnished by individuals and public agencies in this report, and accepts no responsibility for any deficiencies, misstatements or inaccuracies in the report as a result of misstatements, omissions, misrepresentations, fraudulent, or inaccurate information provided.

Any opinions and/or recommendations presented apply to site conditions existing at the time of performance of services. We are unable to report on or accurately predict events, which may impact the site, following performance of the described services, whether occurring naturally or caused by external forces. We assume no responsibility for conditions we are not authorized to investigate, or conditions not generally recognized as predictable at the time services are performed.

We are not responsible for changes in applicable regulatory standards, practices, or regulations following performance of services.

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9.0 Signature Page

This Phase I Environmental Site Assessment Report was prepared by Mr. Nivas R. Vijay, Project Manager, and reviewed by Mr. Phillip N. Ward, Director of Geologic Services. A Statement of Qualifications of the environmental professionals who completed this report is provided in Appendix T.

Nivas R. Vijay
Project Manager

Phillip N. Ward, LPG
Director of Geologic Services



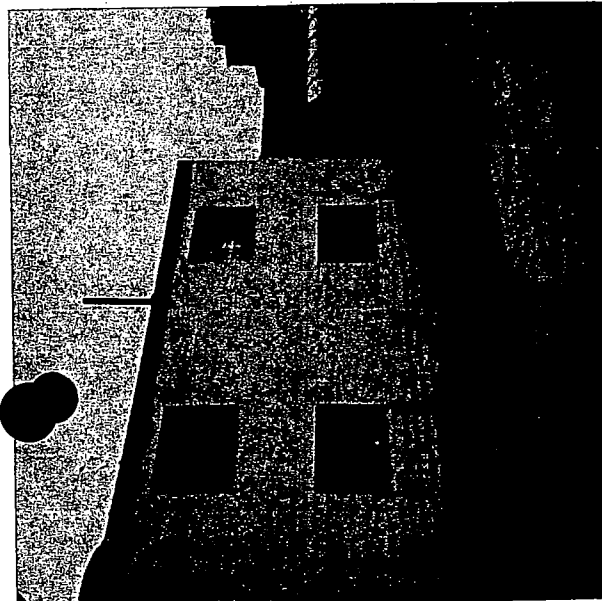
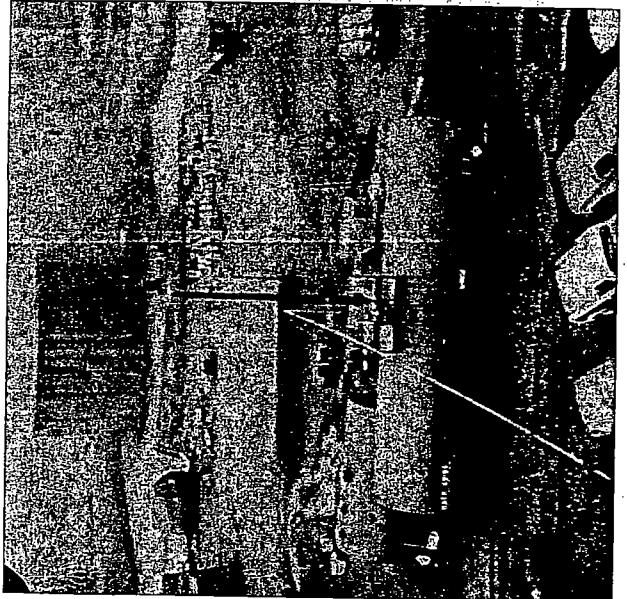
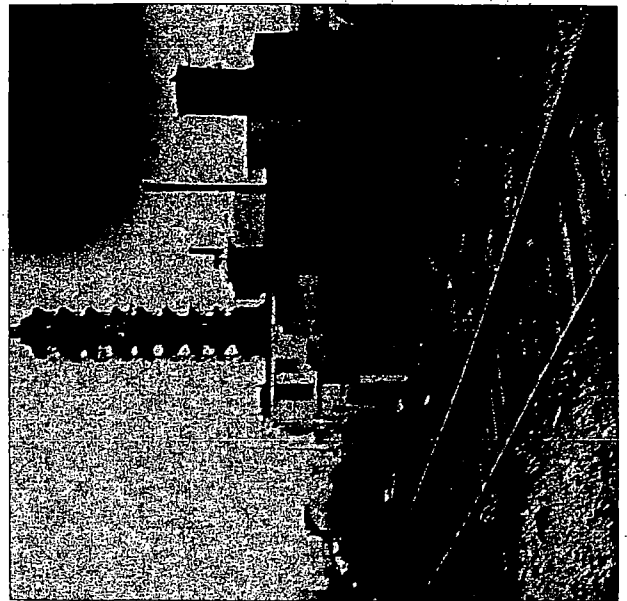
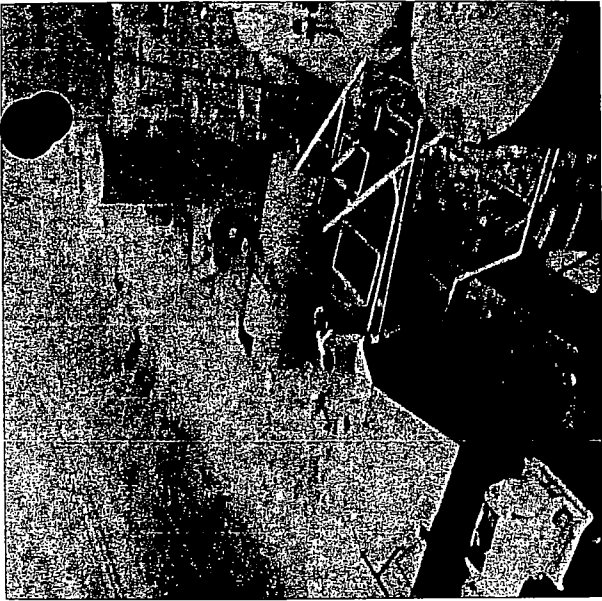
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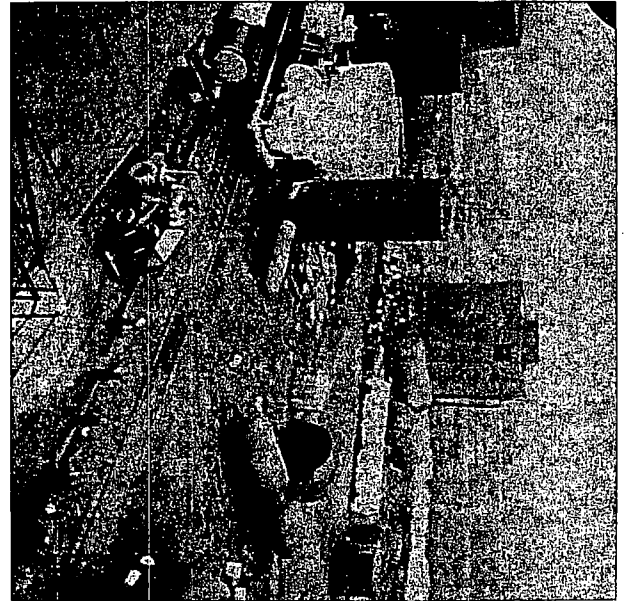
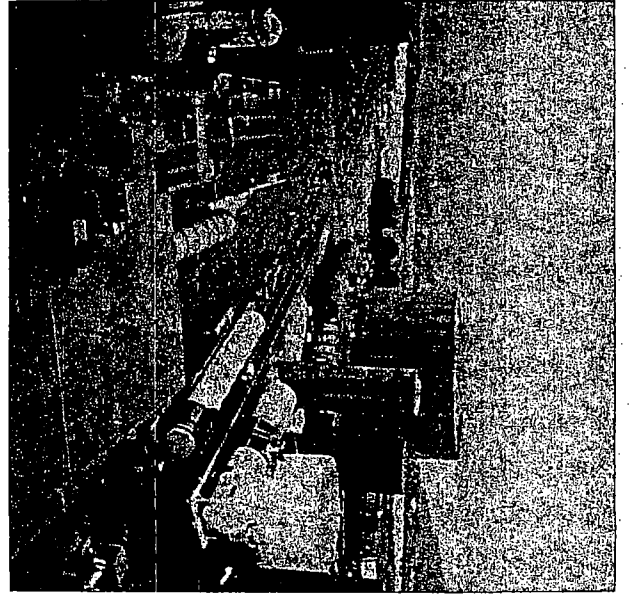


**QUALITY ENVIRONMENTAL
PROFESSIONALS, INC.**
1611 South Franklin Road
Indianapolis, Indiana 46239

**FIGURE 1
SITE LOCATION MAP**
CONSERVATION CHEMICAL
6500 INDUSTRIAL HIGHWAY
GARY, INDIANA

Project Number:	Date:
07-05-022	7/19/07
Drawn By:	Scale:
CWH	1"=400'
Checked By:	Sheet:
NRV	1





FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: CONSERVATION CHEMICAL

PAGE 1 OF 8

U.S. EPA ID: TND 004088447

TDD: F059104057

PAN: FIN 0047AA

DATE: 5-21-91

TIME: 1020

DIRECTION OF
PHOTOGRAPH:
NW

WEATHER
CONDITIONS:
85° SUNNY

PHOTOGRAPHED BY:
SCHARSTENSE

SAMPLE ID
(if applicable):

DESCRIPTION: SCRAP PILE, DRUMS, STORAGE TANKS ONSITE



DATE: 5-20

TIME: 15:40

DIRECTION OF
PHOTOGRAPH:
SE

WEATHER
CONDITIONS:
65° OVERCAST

PHOTOGRAPHED BY:
J. MARCEREAU

SAMPLE ID
(if applicable):

DESCRIPTION: OIL STAINED SOIL ON WESTERN BORDER OF SITE, NEAR TRACKS



FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: CONSERVATION CHEMICAL

PAGE 2 OF 8

U.S. EPA ID: IND 0040 883447

TDD: F05 9104 057

PAN: FIN0047PA

DATE: 5-21-91

TIME: 1020

DIRECTION OF
PHOTOGRAPH:

NW

WEATHER
CONDITIONS:

85° SUNNY

PHOTOGRAPHED BY:

JCHRISTENSEN

SAMPLE ID
(if applicable):

DESCRIPTION:

DRUMS, STORAGE TANKS



DATE: 5-21-91

TIME: 1030

DIRECTION OF
PHOTOGRAPH:

NW

WEATHER
CONDITIONS:

85° SUNNY

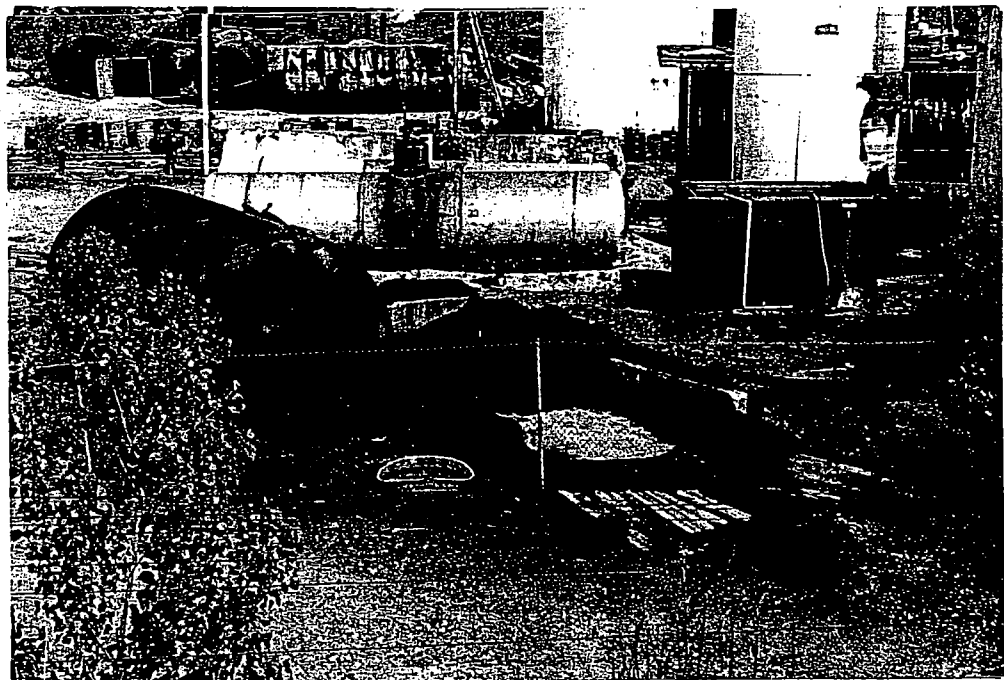
PHOTOGRAPHED BY:

JAMES CHRISTENSEN

SAMPLE ID
(if applicable):

DESCRIPTION:

DRUMS, STORAGE TANKS, STAINED SOIL PILE



FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: CONSERVATION CHEMICAL

PAGE 3 OF 8

U.S. EPA ID: IND0040388917

TDD: F05 9104 057

PAN: FIN0047PA

DATE: 5-21-91

TIME: 10 20

DIRECTION OF
PHOTOGRAPH:
NW

WEATHER
CONDITIONS:
85° SUNNY

PHOTOGRAPHED BY:
J CHRISTENSEN

SAMPLE ID
(if applicable):

DESCRIPTION: DRUMS, STANDING WATER, STORAGE TANKS



DATE: 5-20-91

TIME: 15:35

DIRECTION OF
PHOTOGRAPH:
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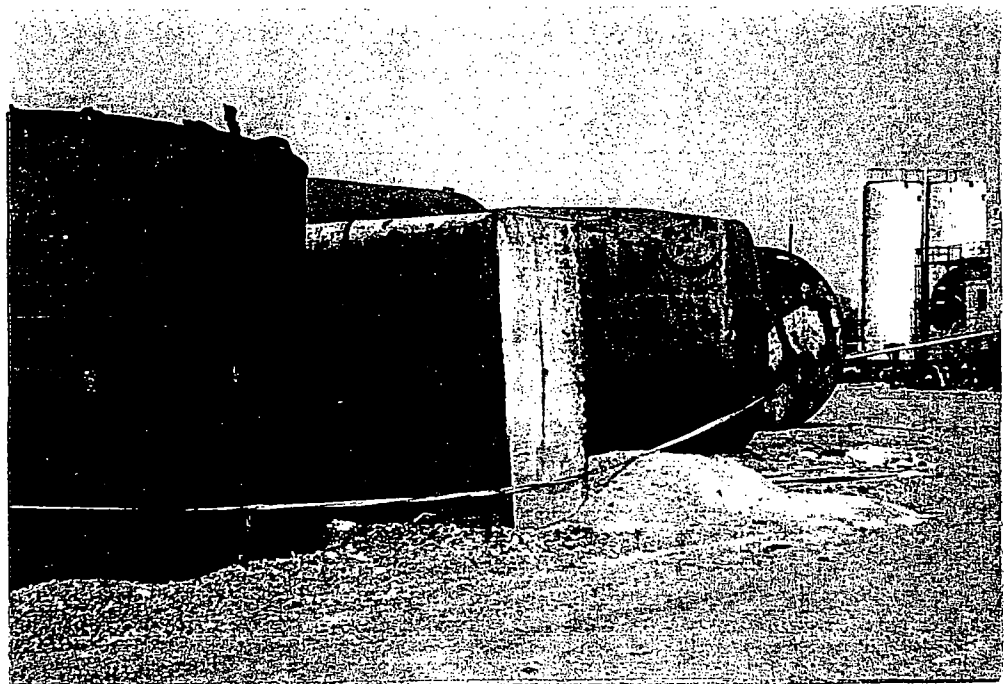
WEATHER
CONDITIONS:
65° OVERCAST

PHOTOGRAPHED BY:
J MARCEREAU

SAMPLE ID
(if applicable):

DESCRIPTION:

STORAGE TANKS



FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: CONSERVATION CHEMICAL

PAGE 4 OF 8

U.S. EPA ID: IND 0040 888997

TDD: F05 9104 057

PAN: F/N 0047PA

DATE: 5-20-91

TIME: 1535

DIRECTION OF
PHOTOGRAPH:

W

WEATHER
CONDITIONS:

65°

OVERCAST

PHOTOGRAPHED BY:

JCHRISTENSEN

SAMPLE ID
(if applicable):



DESCRIPTION: STAINED SOIL, STANDING WASTE W OF RAILROAD TRACKS

HEADING TOWARD SITE FROM SES

DATE: 5-20-91

TIME: 1545

DIRECTION OF
PHOTOGRAPH:

NE

WEATHER
CONDITIONS:

65° OVERCAST

PHOTOGRAPHED BY:

JCHRISTENSEN

SAMPLE ID
(if applicable):



DESCRIPTION:

SURFACE IMPOUNDMENT IN SOUTHERN MOUNTAIN CORNER ON SITE

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: CONSERVATION CHEMICAL

PAGE 5 OF 8

U.S. EPA ID: INP0040888972

TDD: FOS 9104 057

PAN: FIN0047 PA

DATE: 5-21-91

TIME: 1040

DIRECTION OF
PHOTOGRAPH:

NW

WEATHER
CONDITIONS:

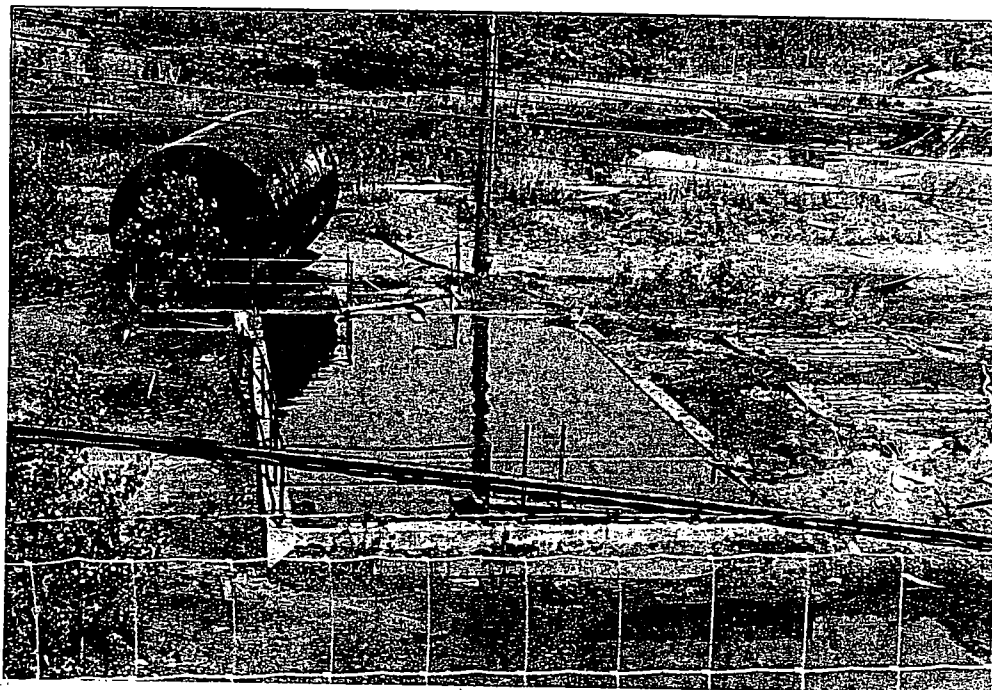
85°

SUNNY

PHOTOGRAPHED BY:

S. CHRISTENSEN

SAMPLE ID
(if applicable):



DESCRIPTION:

PIT ON SITE WITH STANDING WATER

DATE: 5-21-91

TIME: 1040

DIRECTION OF
PHOTOGRAPH:

NW

WEATHER
CONDITIONS:

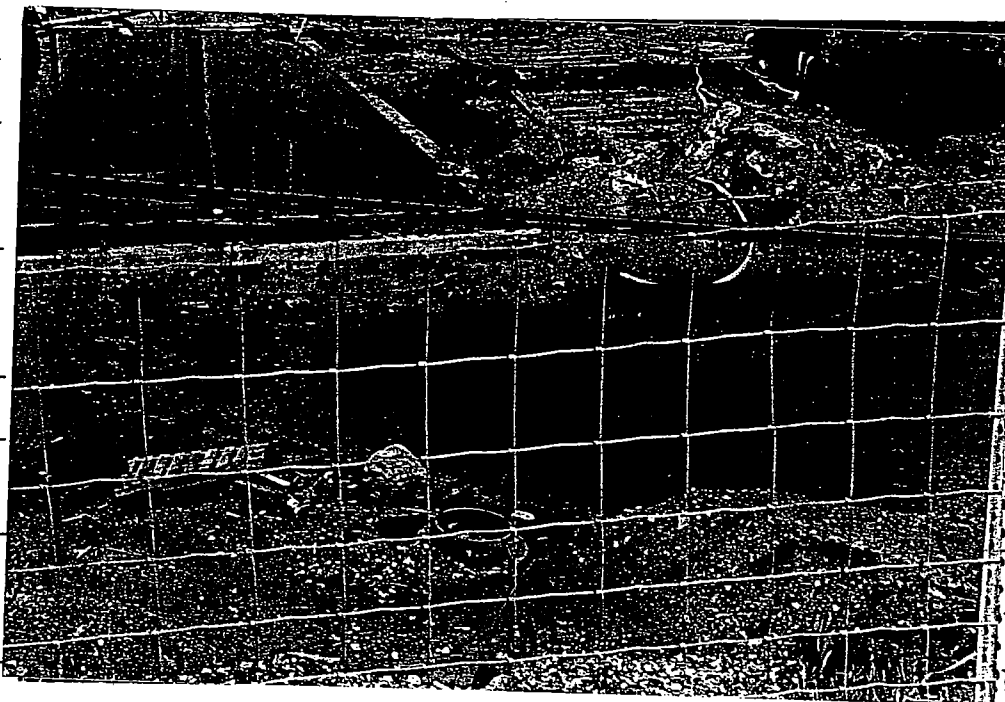
85°

SUNNY

PHOTOGRAPHED BY:

S. CHRISTENSEN

SAMPLE ID
(if applicable):



DESCRIPTION:

DRAIN NEAR MANMADE PIT ON EASTERN BOUNDARY OF SITE

FIELD PHOTOGRAPHY LOG SHEET

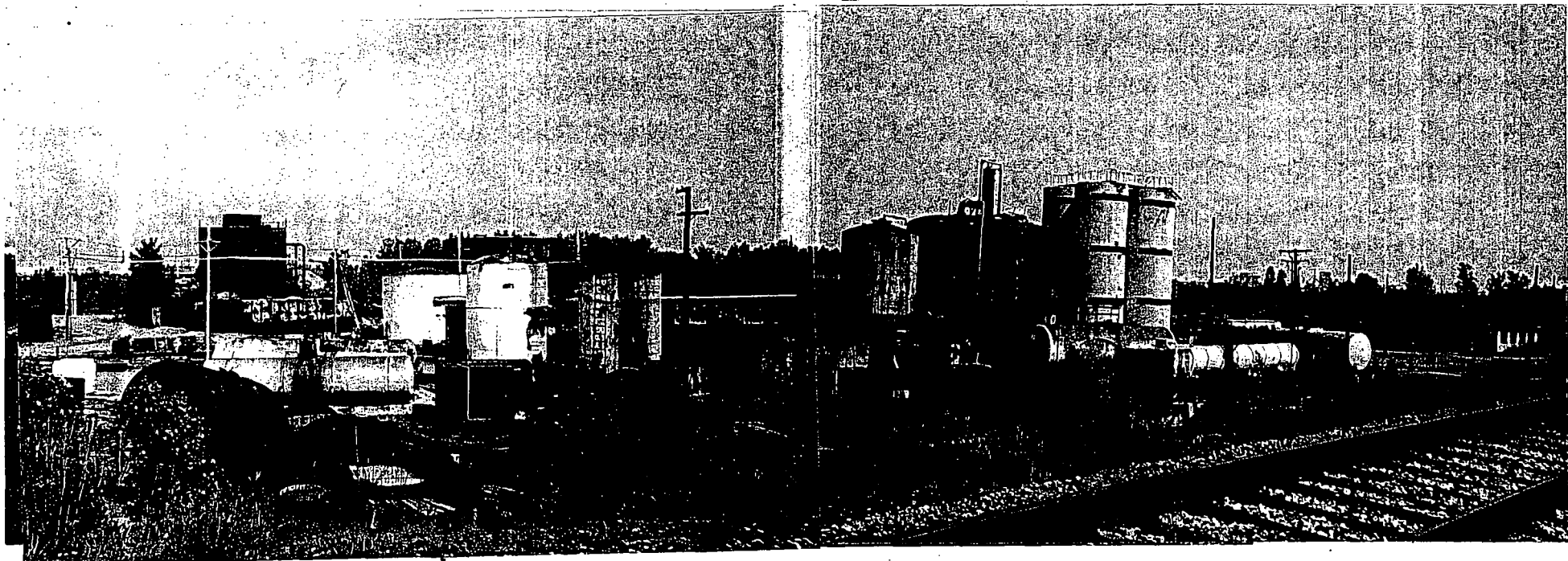
SITE NAME: CONSERVATION CHEMICAL

PAGE 7 OF 8

U.S. EPA ID: IND 0040 488991

TDD: FOS 4104 057

PAN: FIN000478A



DATE: 5-21-91 TIME: 1045 DIRECTION OF PHOTOGRAPH: NW PHOTOGRAPHED BY: JCHRISTENSEN

WEATHER CONDITIONS: 85° sunny SAMPLE ID (if applicable): _____

DESCRIPTION: PANORAMIC VIEW OF NORTHEAST END OF SITE

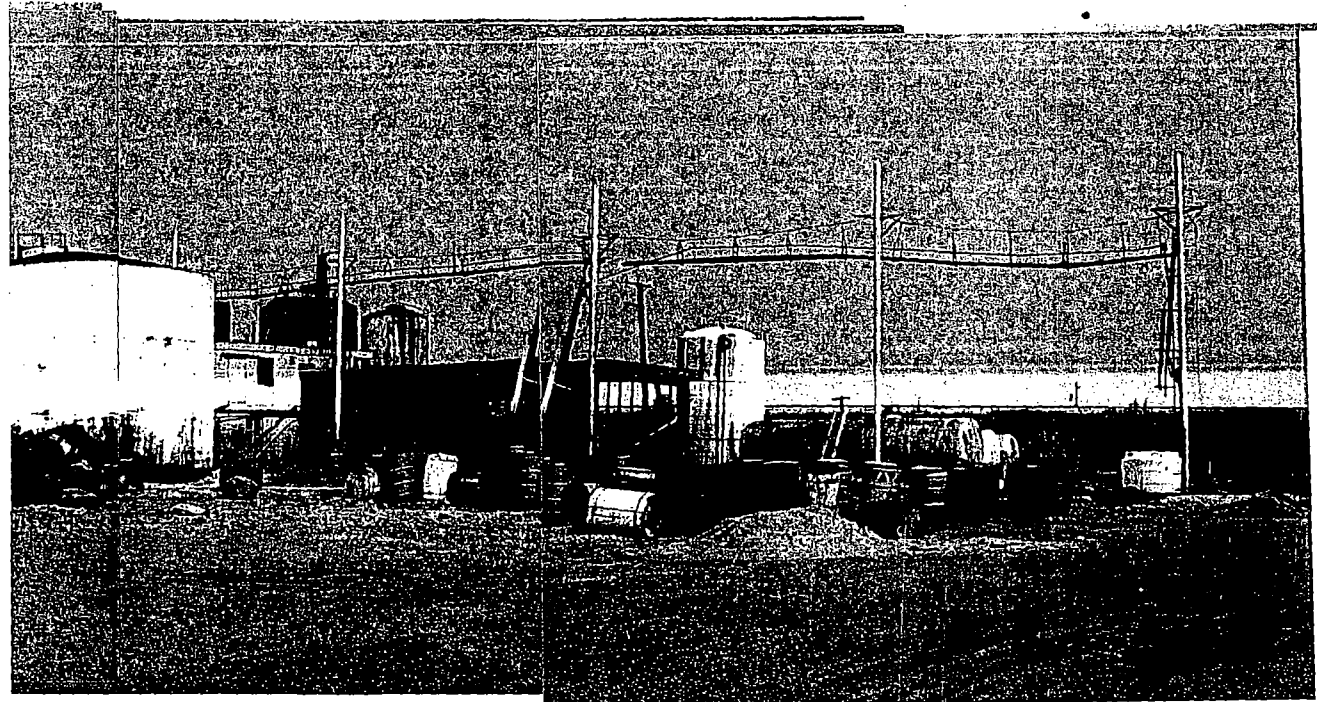
FIELD PHOTOGRAPHY LOG SHEET

AL

PAGE 8 OF 8

TDD: F65-9104 057

PAN: FIN0047 PA



DIRECTION OF PHOTOGRAPH: E PHOTOGRAPHED BY: GCHRISTENSEN

T SAMPLE ID (if applicable): _____

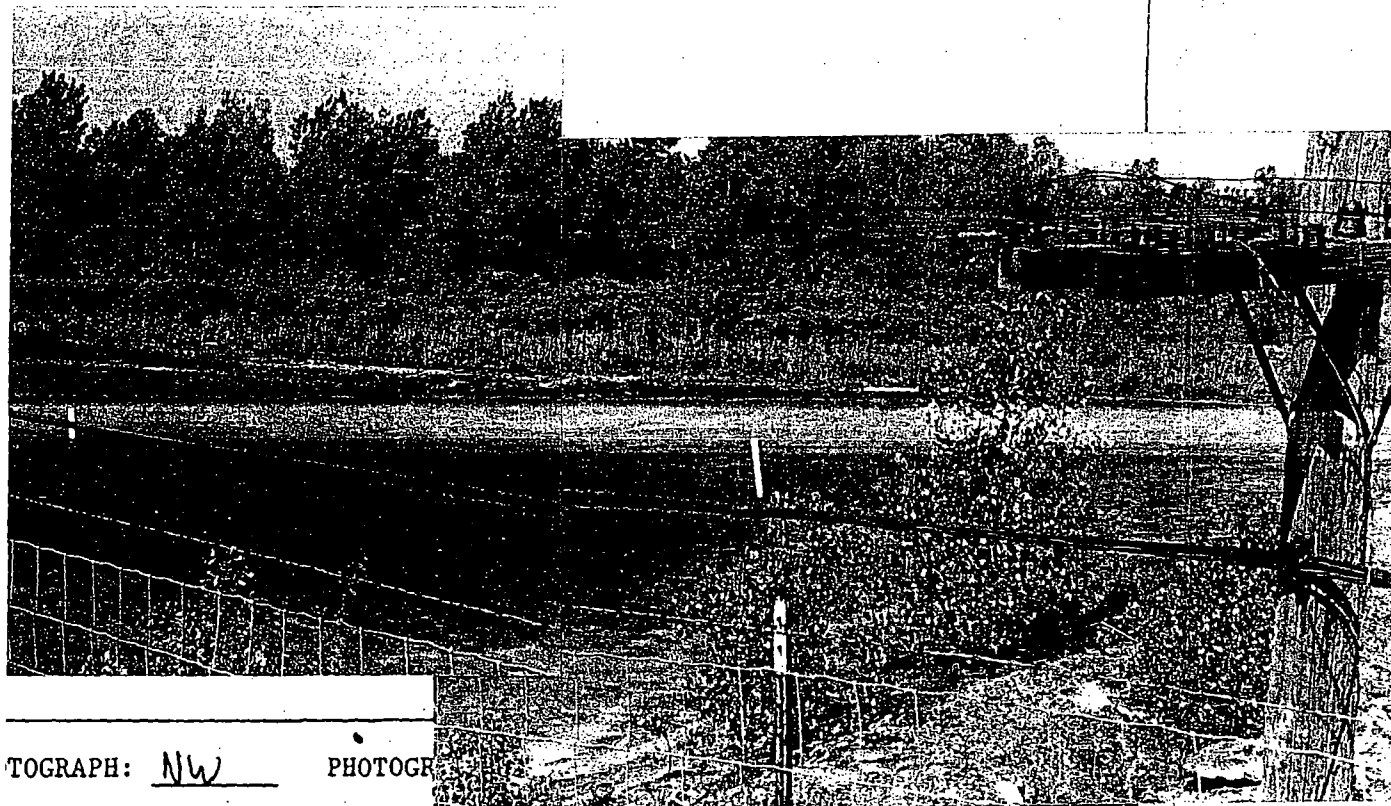
PLANT and DRUMS and STORAGE TANKS

PHOTOGRAPHY LOG SHEET

PAGE 6 OF 8

F05 9104 057

PAN: FW004700



TOGRAPH: NW

PHOTOGRAPH

SAMPLE ID (if applicable):

NDMENT ON SOUTHERN END OF SITE JCHRISTENSEN



Photo No. 1: View looking northwest at subject site.



Photo No. 2: View looking south at subject property.



Photo No. 3: View of the drainage culvert located in northern portion of the property.



Photo No. 4: View of western boundary of property.



Photo No. 5: View looking at wetlands area along adjacent to the property to the west.



Photo No. 6: View looking at wetlands area along adjacent to the property to the west.

Quality Environmental Professionals, Inc.



1611 South Franklin Road
Indianapolis, Indiana 46239

07-05-022.00

Site Photographs for:
Former Conservation Chemical
6500 Industrial Highway
Gary, Indiana 46406



Photo No. 7: View looking south at property.

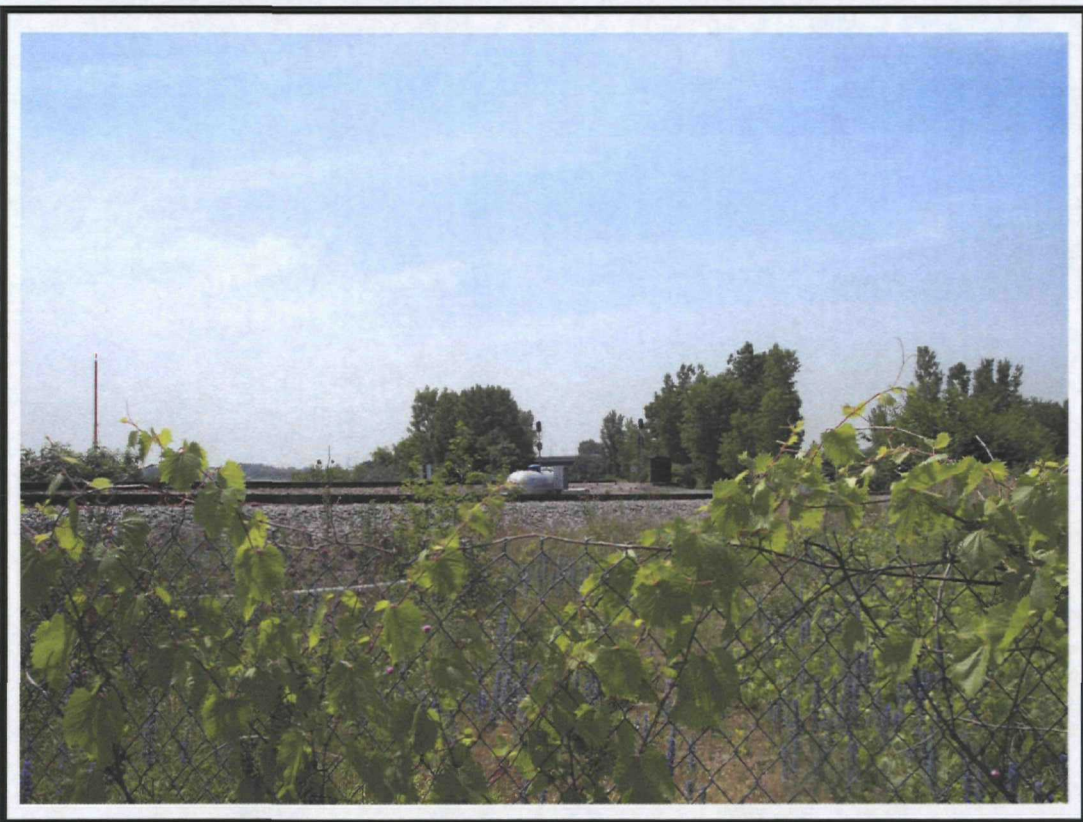


Photo No. 8: View looking southeast at Elgin, Joliet and Eastern Railroad

Quality Environmental Professionals, Inc.
Qepi 1611 South Franklin Road
 Indianapolis, Indiana 46239
 07-05-022.00

Site Photographs for:
Former Conservation Chemical
6500 Industrial Highway
Gary, Indiana 46406



Photo No. 9: View looking at vault containing one recovery well

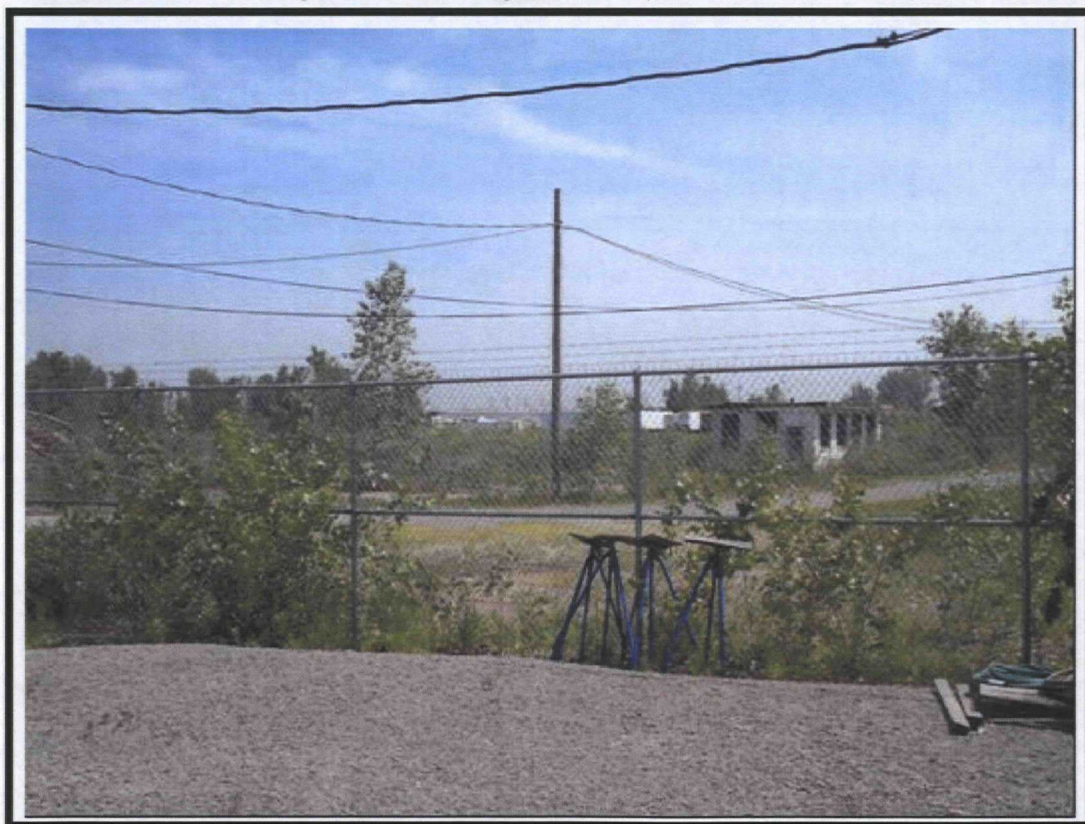


Photo No. 10: View looking northwest at Western Scrap property

Quality Environmental Professionals, Inc.
Qepi 1611 South Franklin Road
 Indianapolis, Indiana 46239
 07-05-022.00

Site Photographs for:
Former Conservation Chemical
6500 Industrial Highway
Gary, Indiana 46406

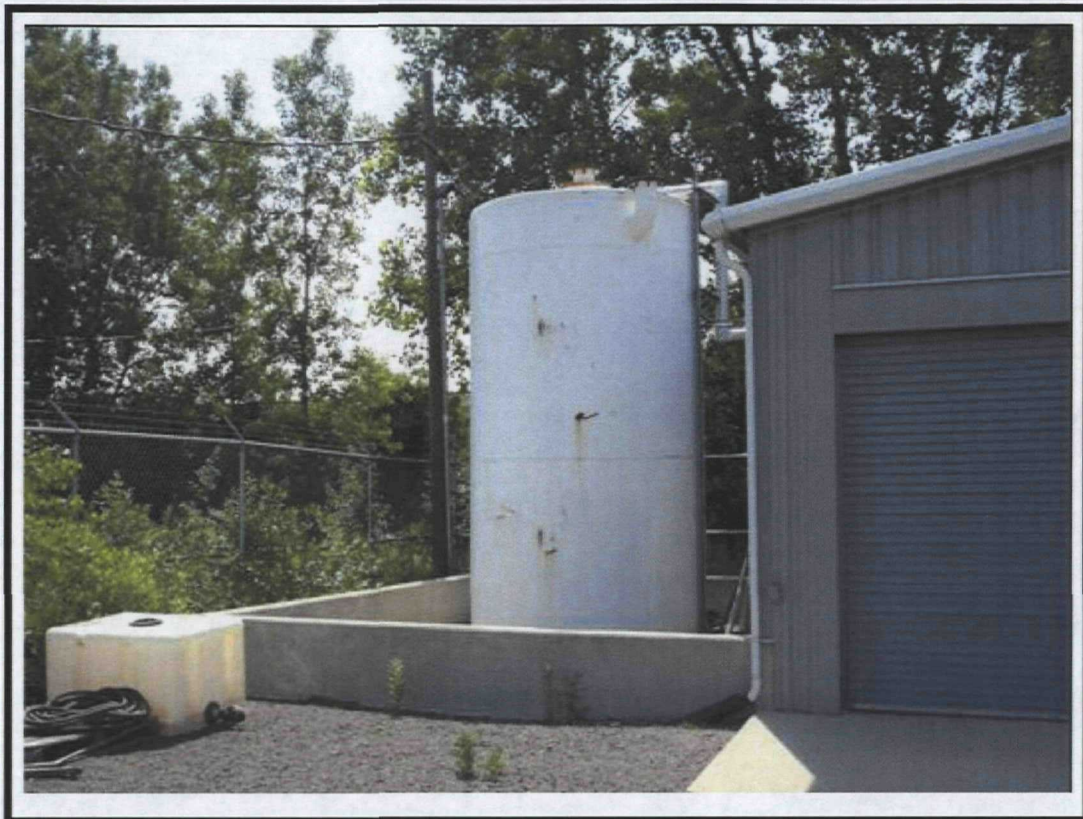


Photo No. 11: View of 5,000-gallon AST and remediation system shed.



Photo No. 12: View looking at gate entrance into property from the system shed area.

Quality Environmental Professionals, Inc.
Qepi 1611 South Franklin Road
 Indianapolis, Indiana 46239
 07-05-022.00

Site Photographs for:
Former Conservation Chemical
6500 Industrial Highway
Gary, Indiana 46406



2005 Aerial Photo
Highland Quadrangle
Section 35, Township 37N, Range 9W



Site

Base Map: 2005 Statewide Natural Color Aerial Photo



**QUALITY ENVIRONMENTAL
PROFESSIONALS, INC.**
1611 South Franklin Road
Indianapolis, Indiana 46239

CONSERVATION CHEMICAL
6500 INDUSTRIAL HIGHWAY
GARY, INDIANA

Project Number:	Date:
07-05-022	7/19/07
Drawn By:	Scale:
CWH	1"=400'
Checked By:	Sheet:
NRV	1



1998 Aerial Photo
Highland Quadrangle
Section 35, Township 37N, Range 9W



Site

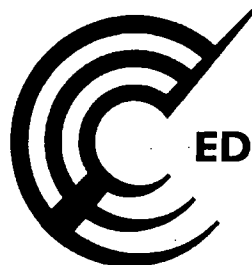
Base Map: 1998 Statewide Aerial Photos (DOQQ)



**QUALITY ENVIRONMENTAL
PROFESSIONALS, INC.**
1611 South Franklin Road
Indianapolis, Indiana 46239

CONSERVATION CHEMICAL
6500 INDUSTRIAL HIGHWAY
GARY, INDIANA

Project Number:	Date:
07-05-022	7/19/07
Drawn By:	Scale:
CWH	1"=400'
Checked By:	Sheet:
NRV	1



EDR® Environmental
Data Resources Inc

The EDR Aerial Photo Decade Package

**Conservation Chemical Company
6500 Industrial Highway
Gary, IN 46406**

Inquiry Number: 1940968.5

May 30, 2007

The Standard in Environmental Risk Information

**440 Wheelers Farms Road
Milford, Connecticut 06461**

Nationwide Customer Service

**Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com**

EDR Aerial Photo Decade Package

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Date EDR Searched Historical Sources:

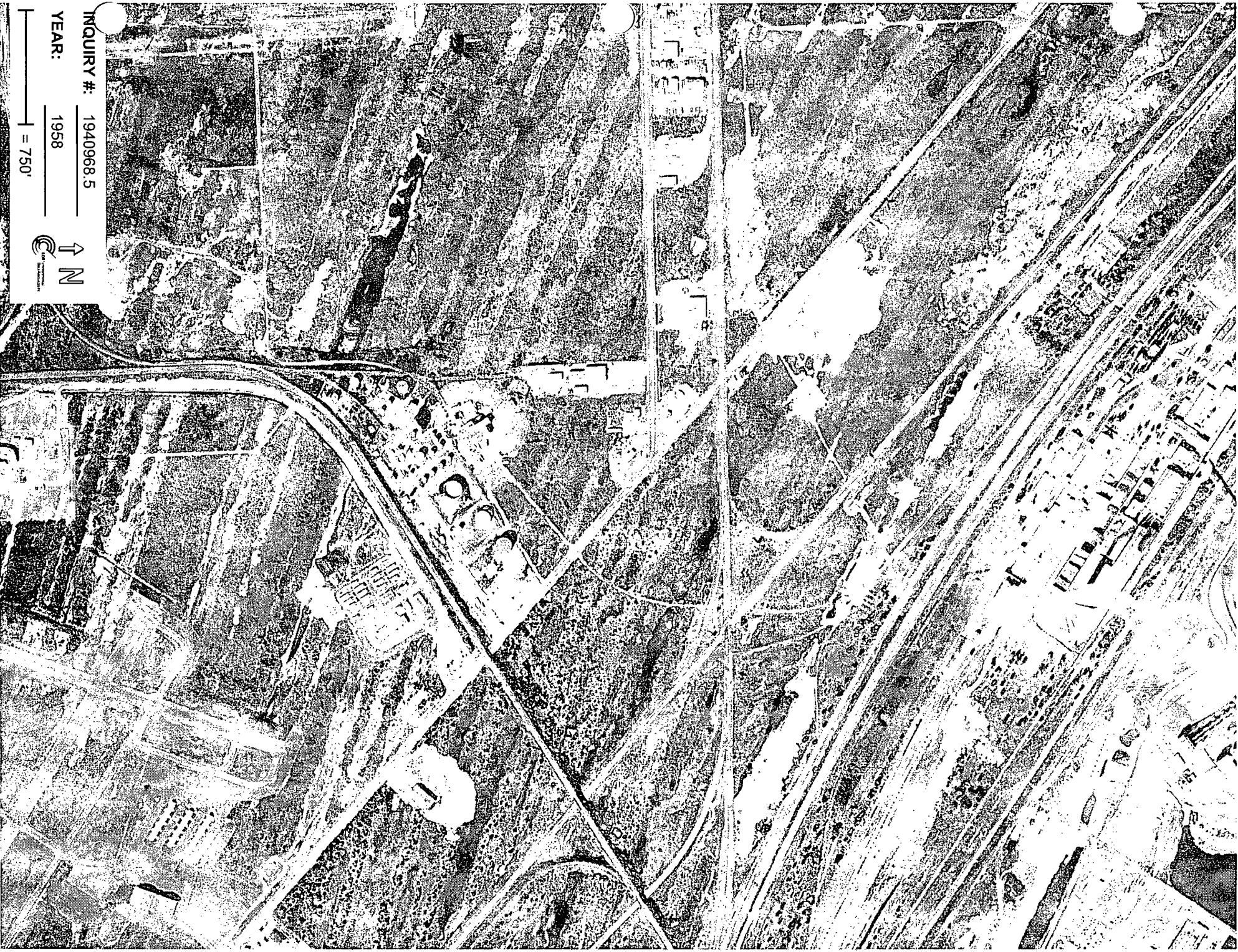
Aerial Photography May 30, 2007

Target Property:

6500 Industrial Highway

Gary, IN 46406

<u><i>Year</i></u>	<u><i>Scale</i></u>	<u><i>Details</i></u>	<u><i>Source</i></u>
1958	Aerial Photograph. Scale: 1"=750'	Panel #: 2441087-F4/Flight Date: September 12, 1958	EDR
1965	Aerial Photograph. Scale: 1"=750'	Panel #: 2441087-F4/Flight Date: July 15, 1965	EDR
1973	Aerial Photograph. Scale: 1"=833'	Panel #: 2441087-F4/Flight Date: September 06, 1973	EDR
1987	Aerial Photograph. Scale: 1"=833'	Panel #: 2441087-F4/Flight Date: June 15, 1987	EDR
1992	Aerial Photograph. Scale: 1"=833'	Panel #: 2441087-F4/Flight Date: March 24, 1992	EDR



INQUIRY #: 1940968.5

YEAR: 1958

1 = 750'



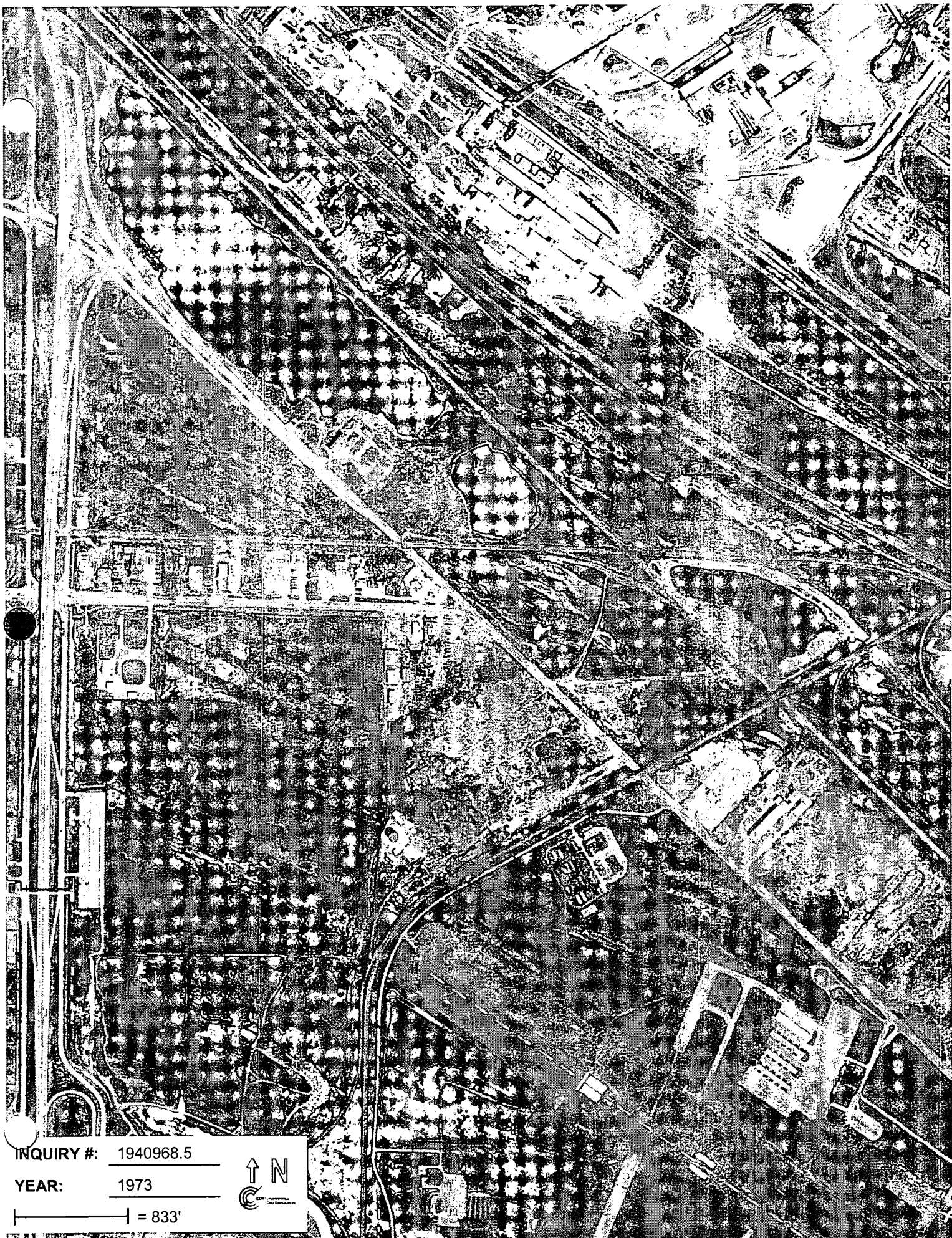


INQUIRY #: 1940968.5

YEAR: 1965

| = 750'



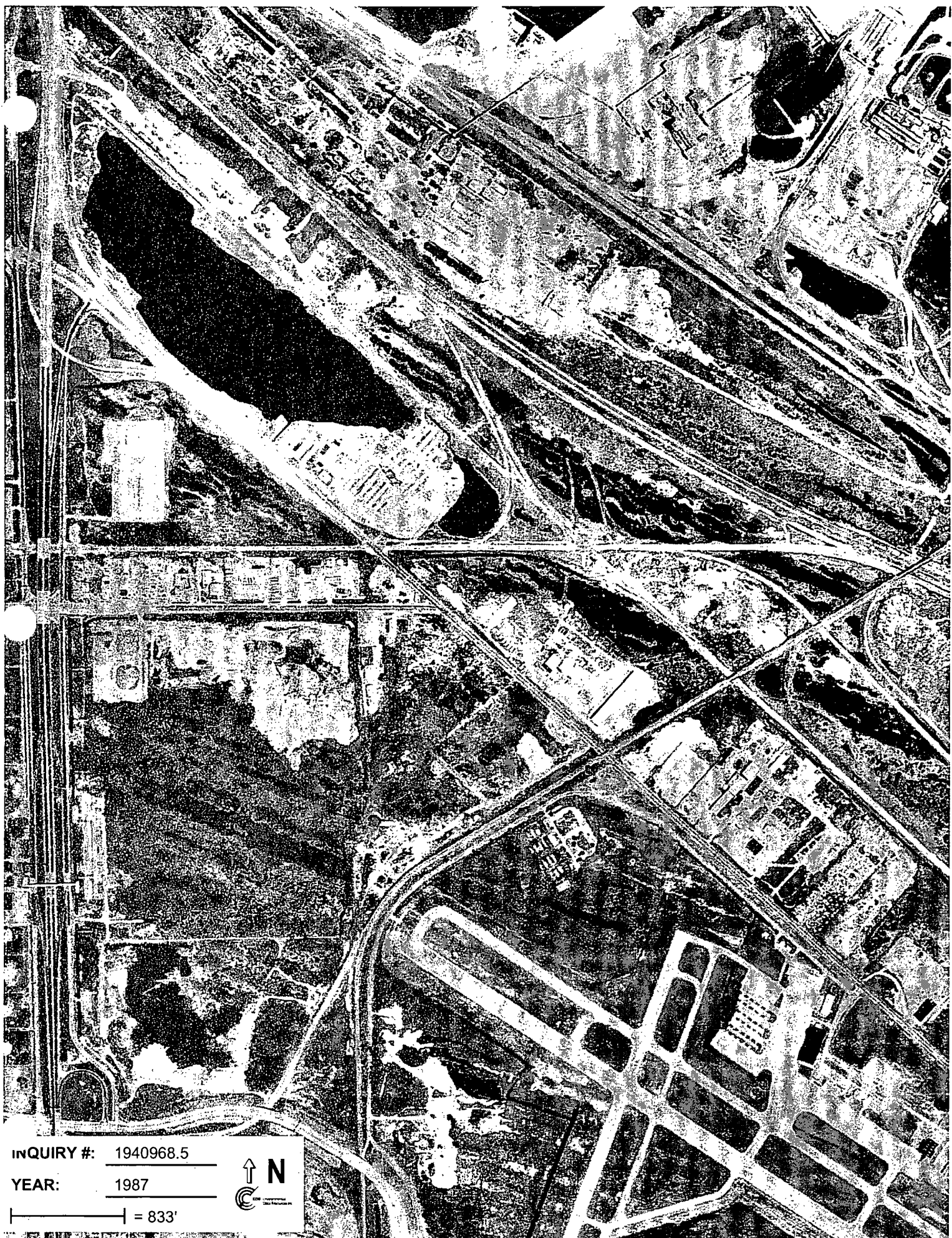


INQUIRY #: 1940968.5

YEAR: 1973

— = 833'



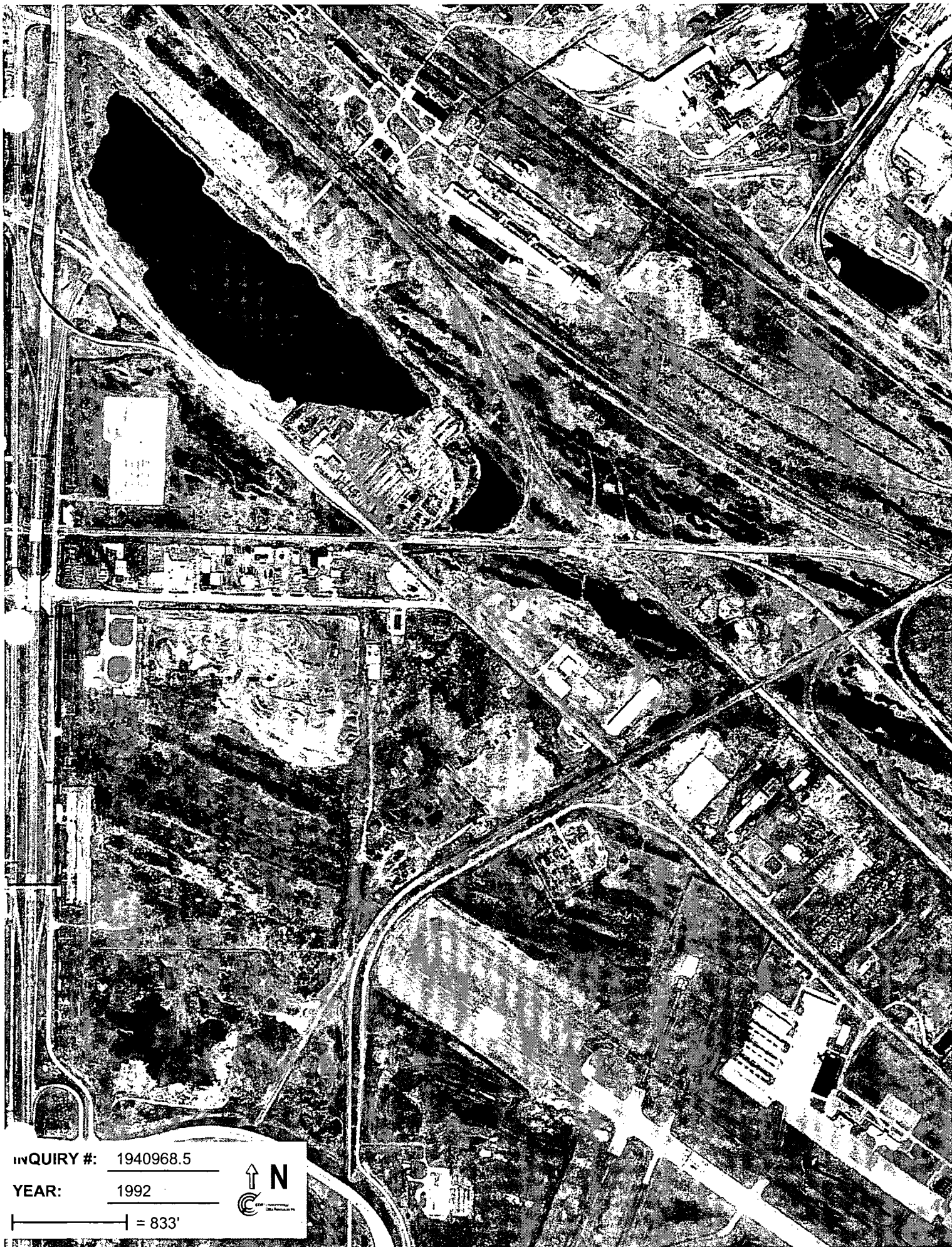


INQUIRY #: 1940968.5

YEAR: 1987

| = 833'





INQUIRY #: 1940968.5

YEAR: 1992

| = 833'



2001 020630

COMMISSIONERS QUIT CLAIM DEED

THIS INDENTURE WITNESSETH THAT, the Board of Commissioners of Lake County, State of Indiana, RELEASE, QUIT-CLAIM, AND CONVEY to

GARY - CHICAGO AIRPORT AUTHORITY
6001 INDUSTRIAL HIGHWAY
GARY, IN 46404

for and in consideration of the sum of FIVE HUNDRED TWENTY FIVE AND 0/100 DOLLARS (\$525) the receipt of which is hereby acknowledged, the following described real estate in Lake County, State of Indiana:

PROPERTY ID: 25-40-0151-0008
Common Address: 6500 INDUSTRIAL HIGHWAY
GARY, IN 46406

Legal Description: BEGINNING AT A POINT IN THE WEST LINE OF THE NE 1/4 OF SAID SECTION 35, WHICH IS 404.33 FEET SOUTH OF THE NORTHWEST CORNER OF THE NE 1/4 OF SAID SECTION 35; THENCE SOUTH ALONG THE WEST LINE OF THE NE 1/4 OF SAID SECTION 35; 412.26 FEET MORE OR LESS, TO A POINT, IN THE NORTHWESTERLY PROPERTY LINE OF PROPERTY CONVEYED BY THE GARY LAND COMPANY, TO THE CHICAGO, LAKE SHORE EASTERN R.R. COMPANY, NOW ELGIN, JOLIET AND EASTERN R.R. COMPANY, BY DEED DATED APRIL 16, 1910 AND RECORDED WITH RECORDER OF DEEDS OF LAKE COUNTY, INDIANA, IN BOOK 179, PAGE 350, AS DOCUMENT #32505, SAID LINE NOW BEING THE NORTHERLY RIGHT OF WAY LINE OF THE ELGIN, JOLIET AND EASTERN R.R. COMPANY; THENCE NORTHEASTERLY ALONG THE NORTHWESTERLY RIGHT OF WAY LINE OF THE ELGIN, JOLIET AND EASTERN R.R. COMPANY, 660.40 FEET, MORE OR LESS, TO A POINT OF CURVE ON SAID R.R. RIGHT OF WAY; THENCE NORTH 40 DEGREES 20 FEET 45 INCHES WEST A DISTANCE OF 508.24 FEET TO A POINT ON A LINE WHICH IS 500 FEET FROM THE TANGENTIAL PORTION OF THE NORTHWESTERLY RIGHT OF WAY LINE OF SAID ELGIN, JOLIET AND EASTERN RAILROAD COMPANY, MEASURED IN RIGHT ANGLES THERE TO, AND 1543.27 FEET SOUTHWESTERLY FROM THE SOUTHWESTERLY RIGHT OF WAY OF THE INDUSTRIAL HIGHWAY; THENCE SOUTH 44 DEGREES 59 FEET WEST 53.12 FEET MORE OR LESS TO THE SOUTH LINE OF SAID SECTION 26; THENCE CONTINUE ALONG THE LAST DESCRIBED LINE PRODUCED 61.44 FEET, MORE OR LESS TO A POINT WHICH IS 46 FEET EAST OF THE WEST LINE OF SAID NE 1/4 OF SAID SECTION 35, SAID 46 FEET BEING MEASURED AT RIGHT ANGLES TO SAID QUARTER SECTION LINE; THENCE SOUTH ALONG A LINE PARALLEL TO AND 46 FEET DISTANT FROM SAID QUARTER SECTION LINE 259.75 FEET TO A POINT; THENCE SOUTHWESTERLY ALONG A LINE MAKING AN ANGLE OF 24 DEGREES 43 FEET TO THE RIGHT A DISTANCE OF 110 FEET, MORE OR LESS, TO THE POINT OF BEGINNING, IN THE CITY OF GARY, LAKE COUNTY, INDIANA.

This deed is hereby confirmed as the true, voluntary and official act of the Lake County Commissioners.

IN WITNESS WHEREOF, the duly elected, qualified, sworn and acting Board of Commissioners of Lake County, Indiana, have hereunto set their hands as their official act, on this 2nd day of April, 2001.

FINAL ACCEPTANCE FOR TRANSMISSION

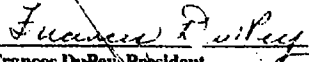
APR - 3 2001

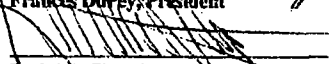
PAGE 1 OF 2

PETER BENJAMIN
LAKE COUNTY AUDITOR

419

The Board of Commissioners Of:
LAKE COUNTY, INDIANA, BY:


Frances DuPey, President

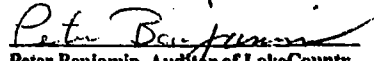

Rudolph Clay, Commissioner


Gerry Scheub, Commissioner

STATE OF INDIANA, LAKE COUNTY, SS

Before me, the undersigned, duly elected, qualified, sworn and acting Auditor in and for said County and State, empowered by law to acknowledge the deeds of the Lake County Commissioners, under I.C. 36-2-2-11, 36-2-9-7, 32-1-2-18, 32-1-2-23, and City of Gary v. Belovich, 1987, 504 N.E.2d 286, do now attest that on this 3rd day of April 2001, personally came the Lake County Commissioners, all of whom are personally known to me, and acknowledged the execution of the above and foregoing instrument as their true, voluntary and official act.

WITNESS MY HAND AND OFFICIAL SEAL


Peter Benjamin, Auditor of Lake County

This instrument is prepared by: Lee J. Christakis, Attorney
7870 Broadway, Suite G
Merrillville, IN 46410

July 16,2007
11:00 AM

Real Property Maintenance Report

Real PM. Report

Page 1 of 2

Lake County
2008 Pay 2009

Owner: Gary - Chicago Airport Authority
Owner Party: Gary - Chicago Airport Authority
Address: 6001 Industrial Highway Gary, IN 46404 USA
Location Address: 6500 Ind Hwy Gary, IN 46407

Property Number: 25-40-0151-0008
Property Type: Real
Map Number: 0335200001
Tax Set: 004-Gary-Calumet
Property Class: 640 Exempt- Municipality
Zoning Type:
Use Type:

QQSec: QSec: Sec: 35 Township: 37
Range: 9 Acres: 4.114 Block: Plat:
Sub Sec: Lot: Sub Lot: Sub Division:

Location Description:

Legal Description: PT. NE.1-4 OF S.35 T.37 R.9 & PT.S2.SE.1-4 OF S.26 T.37 R.9 4.114AC.

Assessments: Res Land 0 Res Improv 0
Non-res Land 300 Non-res Improv 0

Tax Rate: 8.94740 Homestead Credit: 22.25510
Duplicate Number: 0 Replacement Credit: 24.13780
Surplus Payment: 0.00 Advance Payment: 0.00

Charges:

Tax Set/Unit	Charge Type	Total Charge	Balance Due
--------------	-------------	--------------	-------------

Bankruptcy Code:

Tax Sale:

Neighborhood:

Number Of House Holds: 0

Total Assessed: 300

Net Assessed: 0

Under Appeal Value:

TIF District: 25 Gary ADZ-Airport Development Zone

Base AV: 0

Base Res AV: 0

Over Payment: 0.00

Deductions:

Deduction Type	Deduction Amount	Over Written Flag
Non-Taxable	300	No

Property Number: 25-40-0151-0008

Owner Party: Gary - Chicago Airport Authority

Real PM. Report

Page 2 of 2

Total Assessed

Transfers:

Transfer Date, Type, & Status	From Property Number	To Deeded Owner & Address	To Legal Description	Instrument Date & Type	Recorded Date, Book & Page	To Value of Land & Improvements
4/3/2001 Change Owner Complete	25-40-0151-0008	Lake County board of Commissioners Lake County Board Of Commissioners	PT. NE.1-4 OF S.35 T.37 R.9 & PT.S2.SE.1-4 OF S.26 T.37 R.9 4.114AC.	12/4/2000 Tax Title Deed 417	Conservation Chemical Co. Of Ill. Conservation	
4/3/2001 Change Owner Complete	25-40-0151-0008	Gary - Chicago Airport Authority Gary - Chicago Airport Authority 6001 Industrial Highway Gary IN 46404 USA	PT. NE.1-4 OF S.35 T.37 R.9 & PT.S2.SE.1-4 OF S.26 T.37 R.9 4.114AC.	4/2/2001 Comm Deed 419	Lake County board of Commissioners Lake County	

GARY, IN 46406

40-0151-0008

Real Estate Assessment and Transfer Record

LAKE COUNTY, INDIANA

ADDITIONAL INFORMATION

PLAT OF SURVEY AUD#0136 PB#003/14 DOC#95022330 5/2/94
4/24/95 ik 5/5/95

PT. NE.1-4 OF S.35 T.37 R.9 &
PT. S2.SE.1-4 OF
S.26 T.37 R.9 4.114AC.

UNIT 25 40-0151-0008

6500 IND HWY 6 -46407

[illegible]

CONSERVATION CHEMICAL CO. OF ILL.
8900 FRONT ST.
KANSAS CITY, MO.

40-151-8

PT. NE.1-4 OF S.35 T.37 R.9 &
PT. S2. SE.1-4 OF
S.26 T.37 R.9

4.114 AC.

25

40-151-8

Real Estate Assessment and Transfer Record

LAKE COUNTY, INDIANA

40-151-8

ADDITIONAL INFORMATION

4.114 Ac. fr. Key 40-151-6 S.WD # 1312
Pt. NE $\frac{1}{4}$ S $\frac{35}{4}$ & SE $\frac{1}{4}$ Sec. 26 T 37 R 9 Beg on
W. line of Sec. 35 NE $\frac{1}{4}$ 404.33ft S. of NW Cor. then
S. 412.26ft to property line of C.L.E.R.R. then
NE'ly along NW'ly R/W line of RR 660.40ft M/L
to a point of curve on said RR then NE 40 deg.
508.24ft to point on line 500ft fr. Tangen. port
of NW'ly R/W line of RR meas. at right angles
1543.27ft SW'ly fr. Industrial Hwy. then SW
44 Deg. 53.12ft M/L to S. line of Sec. 26
then Con't along last dec. line 61.44ft to a
point which is 46ft E. of W. line of NE $\frac{1}{4}$ of Sec.
35 then S. 259.75ft. then SW'ly making an angle
of 24 deg. to the right a dist of 120ft. M/L
to point of beg.

Year	Key Number	Land	Buildings	Total Valuation	Exemptions	Reason for Value Change	Transfers to
1958							
1959							
1960							
1961							
1962							
1963							
1964							
1965							
1966							
1967		8,230		8,230		Pl. fr. K. 40-151-6	

CONSERVATION CHEMICAL CO. OF ILL.
8900 FRONT ST.
KANSAS CITY, MO. 40-151-8
PT. NE. 1-4 OF S. 35 T. 37 R. 9 &
PT. S2. SE. 1-4 OF
S. 26 T. 37 R. 9 4.114 AC.

Real Estate Assessment and Transfer Record

LAKE COUNTY, INDIANA

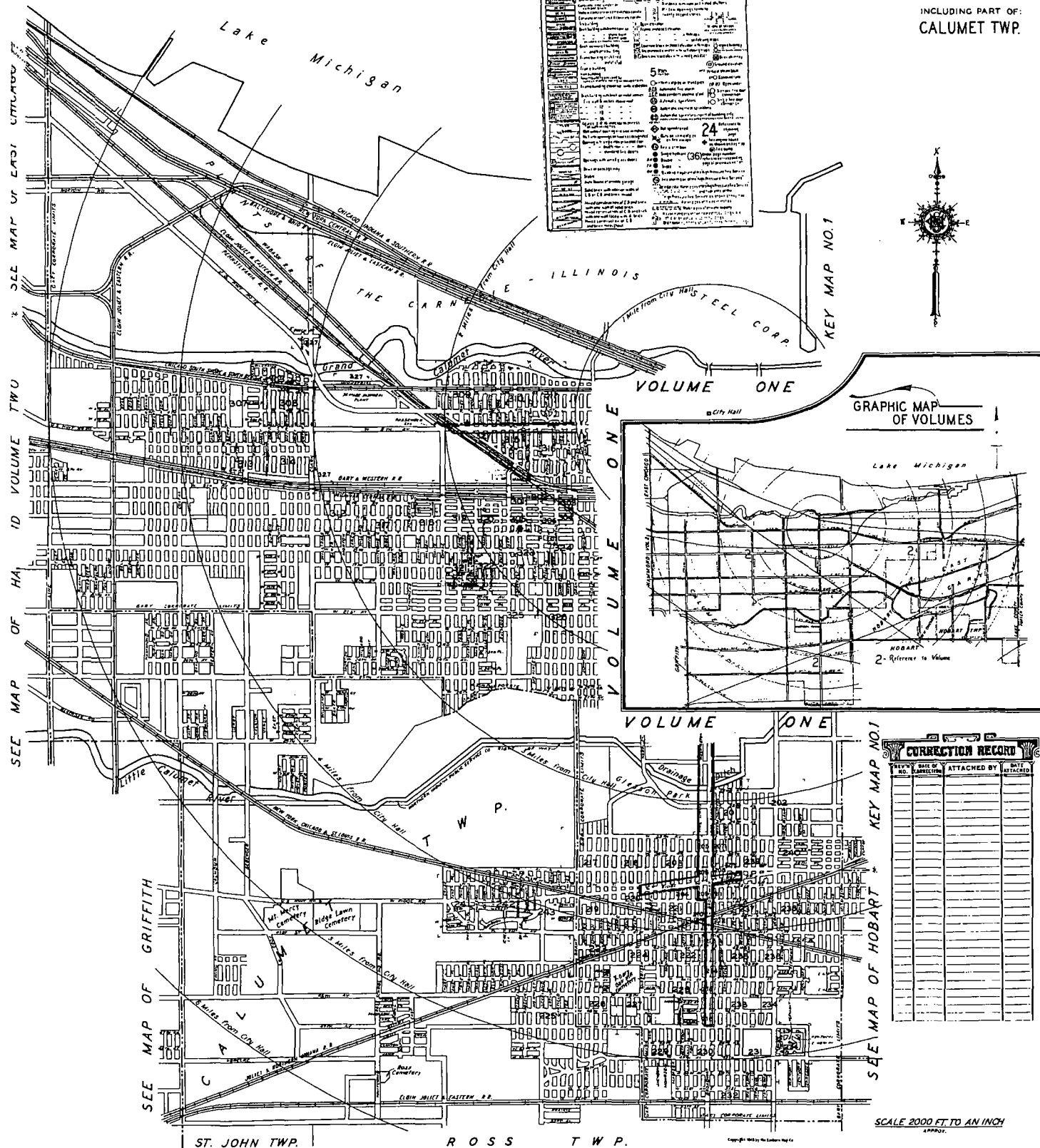
ADDITIONAL INFORMATION

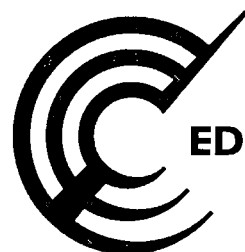
25 8230 40-151-8 8230

APPROX 300 N. MONROE GARY 46406

Year	Key Number	Land	Buildings	Total-Valuation	Exemptions	Reason for Value Change	Transfers to	Date of Instrument	Date of Transfer	Kind of Instrument	All or Part
1968	40151	8	8230	8230	1000	.00*	TAX SALE	OCT 9 1988		II NB	
1969		8230	8330	16560	1000		Tax Sale Oct 16, 1989			CI I NB	
1970		8230	8330	16560	1000						
1971		8230	8330	16560	1000						
1972		8230	8330	16560	1000						
1973		8230	8330	16560	1000						
1974											
1975											
1976											
1977		8230	81260	89490	77/28	18/3/22					
82/83		10970	16000	26970							







EDR® Environmental
Data Resources Inc

The EDR Radius Map with GeoCheck®

**Conservation Chemical Company
6500 Industrial Highway
Gary, IN 46406**

Inquiry Number: 01940968.2r

May 30, 2007

The Standard in Environmental Risk Information

**440 Wheelers Farms Road
Milford, Connecticut 06461**

Nationwide Customer Service

**Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com**

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Map Findings	6
Orphan Summary	110
EPA Waste Codes	EPA-1
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-7
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Physical Setting Source Records Searched	A-15

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

6500 INDUSTRIAL HIGHWAY
GARY, IN 46406

COORDINATES

Latitude (North): 41.628100 - 41° 37' 41.2"
Longitude (West): 87.419800 - 87° 25' 11.3"
Universal Transverse Mercator: Zone 16
UTM X (Meters): 465030.5
UTM Y (Meters): 4608358.0
Elevation: 590 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 41087-F4 WHITING, IN
Most Recent Revision: 1998

South Map: 41087-E4 HIGHLAND, IN
Most Recent Revision: 1998

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 6 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
WESTERN SCRAP/BERRY OIL 6500 INDUSTRIAL HIGHWAY GARY, IN 46406	BROWNFIELDS	N/A
SWIFT TRANSPORTATION 6500 W INDUSTRIAL HWY GARY, IN 46406	ICIS	N/A
6500 W INDUSTRIAL HWY 6500 W INDUSTRIAL HWY GARY, IN	HMIRS	N/A
CONSERVATION CHEMICAL COMPANY 6500 INDUSTRIAL HIGHWAY GARY, IN 46406	ICIS	N/A
6500 WEST INDUSTRIAL HIGHWAY 6500 WEST INDUSTRIAL HIGHWAY GARY, IN 46406	IN Spills	N/A

EXECUTIVE SUMMARY

CONSERVATION CHEM CO 6500 INDUSTRIAL HWY GARY, IN 46406	CERCLIS RCRA-SQG FINDS CORRACTS IN MANIFEST	IND040888992
CONSERVATION CHEMICAL COMPANY 6500 INDUSTRIAL HIGHWAY GARY, IN 46406	FINDS	110016661209
6500 INDUSTRIAL HIGHWAY 6500 INDUSTRIAL HIGHWAY GARY, IN 46402	IN Spills	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

FEDERAL RECORDS

Proposed NPL Delisted NPL NPL LIENS RCRA-LQG ERNS US ENG CONTROLS US INST CONTROL DOD US BROWNFIELDS CONSENT UMTRA ODI TRIS TSCA FTTS SSTS LUCIS DOT OPS HIST FTTS US CDL RADINFO LIENS 2 PADS MLTS MINES RAATS	Proposed National Priority List Sites National Priority List Deletions Federal Superfund Liens Resource Conservation and Recovery Act Information Emergency Response Notification System Engineering Controls Sites List Sites with Institutional Controls Department of Defense Sites A Listing of Brownfields Sites Superfund (CERCLA) Consent Decrees Uranium Mill Tailings Sites Open Dump Inventory Toxic Chemical Release Inventory System Toxic Substances Control Act FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) Section 7 Tracking Systems Land Use Control Information System Incident and Accident Data FIFRA/TSCA Tracking System Administrative Case Listing Clandestine Drug Labs Radiation Information Database CERCLA Lien Information PCB Activity Database System Material Licensing Tracking System Mines Master Index File RCRA Administrative Action Tracking System
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EXECUTIVE SUMMARY

STATE AND LOCAL RECORDS

SHWS.....	List of Hazardous Waste Response Sites Scored Using the Indiana Scoring Model
SWF/LF.....	Permitted Solid Waste Facilities
BULK.....	Registered Bulk Fertilizer and Pesticide Storage Facilities
AUL.....	Sites with Restrictions
VCP.....	Voluntary Remediation Program Site List
DRYCLEANERS.....	Drycleaner Facility Listing
AIRS.....	Permitted Sources & Emissions Listing
TIER 2.....	Tier 2 Facility Listing

TRIBAL RECORDS

INDIAN RESERV.....	Indian Reservations
INDIAN LUST.....	Leaking Underground Storage Tanks on Indian Land
INDIAN UST.....	Underground Storage Tanks on Indian Land

EDR PROPRIETARY RECORDS

Manufactured Gas Plants.... EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL RECORDS

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 01/25/2007 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>MIDCO II</i>	<i>5900 INDUSTRIAL HWY</i>	<i>1/2 - 1 SE</i>	<i>0</i>	<i>20</i>

EXECUTIVE SUMMARY

CERCLIS-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 03/21/2007 has revealed that there are 5 CERC-NFRAP sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
LURIA BROTHERS & COMPANY INCOR	6633 WEST INDUSTRIAL HI	0 - 1/8 NNW 13		59
ROLAND DUMP-SITE #73	EAST OF INDUSTRIAL HWY	1/4 - 1/2ENE 18		65
CALUMET INDUSTRIES	6010 WEST INDUSTRIAL HI	1/4 - 1/2SE D21		67
GARY REGIONAL AIRPORT	6001 W INDUSTRIAL HWY	1/4 - 1/2SE D22		71
WESTERN SCRAP CORP	6901 W CHICAGO	1/4 - 1/2WNW 23		77

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/14/2007 has revealed that there are 3 CORRACTS sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
LURIA BROTHERS & COMPANY INCOR	6633 WEST INDUSTRIAL HI	0 - 1/8 NNW 13		59
CITCO PETROLEUM COMPANY	2500 EAST CHICAGO AVENU	1/2 - 1 W 26		79
GARY DEV CO INC	479 N CLINE AVE	1/2 - 1 SW 27		98

RCRAInfo: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 06/13/2006 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
GARY REGIONAL AIRPORT	6001 W INDUSTRIAL HWY	1/4 - 1/2SE D22		71

EXECUTIVE SUMMARY

RCRAInfo: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/13/2006 has revealed that there are 3 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
LAKE CO BD OF COMMISSIONERS	1/4 MI E OF HWY US 12 &	0 - 1/8 NNW 10		50
OSI ENVIRONMENTAL INC	6980 CHICAGO AVE	0 - 1/8 NNW B11		54
LURIA BROTHERS & COMPANY INCOR	6633 WEST INDUSTRIAL HI	0 - 1/8 NNW 13		59

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
NIKE C-45 - GARY AIRPORT		1/2 - 1 SSE 28		108

RODS: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 03/27/2007 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
MIDCO II	5900 INDUSTRIAL HWY	1/2 - 1 SE 0		20

STATE AND LOCAL RECORDS

LUST: Lust List.

A review of the LUST list, as provided by EDR, and dated 03/26/2007 has revealed that there are 4 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
P. I. & I MOTOR EXPRESS Description: Active Description: Active	7000 CHICAGO AVENUE	0 - 1/8 NNW B12		58
RIECHMANN ENTERPRISES INC Description: Active Description: Active	7200 CHICAGO AVE	1/8 - 1/4 WNW C14		63

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
CORRECT CONSTRUCTION INC Description: NFA-UST Branch Guidance Manual	6012 W INDUSTRIAL HWY	1/4 - 1/2 SE	D20	66

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
P G T TRUCKING INC Description: Active Description: Active	7212 CHICAGO	1/8 - 1/4 WNW C16		65

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Management's Indiana Registered Underground Storage Tanks list.

A review of the UST list, as provided by EDR, and dated 03/26/2007 has revealed that there are 5 UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
GO-TANE SERVICE STATIONS INC	6415 INDUSTRIAL HIGHWAY	0 - 1/8	9	49
P. I. & I MOTOR EXPRESS	7000 CHICAGO AVENUE	0 - 1/8 NNW B12		58
RIECHMANN ENTERPRISES INC	7200 CHICAGO AVE	1/8 - 1/4 WNW C14		63
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
P G T TRUCKING INC	7212 CHICAGO	1/8 - 1/4 WNW C15		64
INDIANA CEDNTRAL ENGINE & EQUI	7330 W CHICAGO AVE	1/8 - 1/4 WNW 17		65

MANIFEST:

A review of the IN MANIFEST list, as provided by EDR, and dated 12/31/2005 has revealed that there are 3 IN MANIFEST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
LAKE CO BD OF COMMISSIONERS	1/4 MI E OF HWY US 12 &	0 - 1/8 NNW 10		50
OSI ENVIRONMENTAL INC	6980 CHICAGO AVE	0 - 1/8 NNW B11		54
LURIA BROTHERS & COMPANY INCOR	6633 WEST INDUSTRIAL HI	0 - 1/8 NNW 13		59

BROWNFIELDS: >A brownfield site is an industrial or commercial property that is abandoned, inactive, or underutilized, on which expansion or redevelopment is complicated due to the actual or perceived environmental contamination.

A review of the BROWNFIELDS list, as provided by EDR, and dated 03/28/2007 has revealed that there are 3 BROWNFIELDS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
FORMER RECOVER, INC.	6917 INDUSTRIAL HWY	1/4 - 1/2 NNW	19	66
REFAX, INC. PROPERTY (ADZ)	5934-6122 INDUSTRIAL HI	1/4 - 1/2 SE	E24	79
AVENUE TOWING PROPERTY	5930 INDUSTRIAL HIGHWAY	1/4 - 1/2 SE	E25	79

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name

NIPSCO DH MITCHELL GEN STA

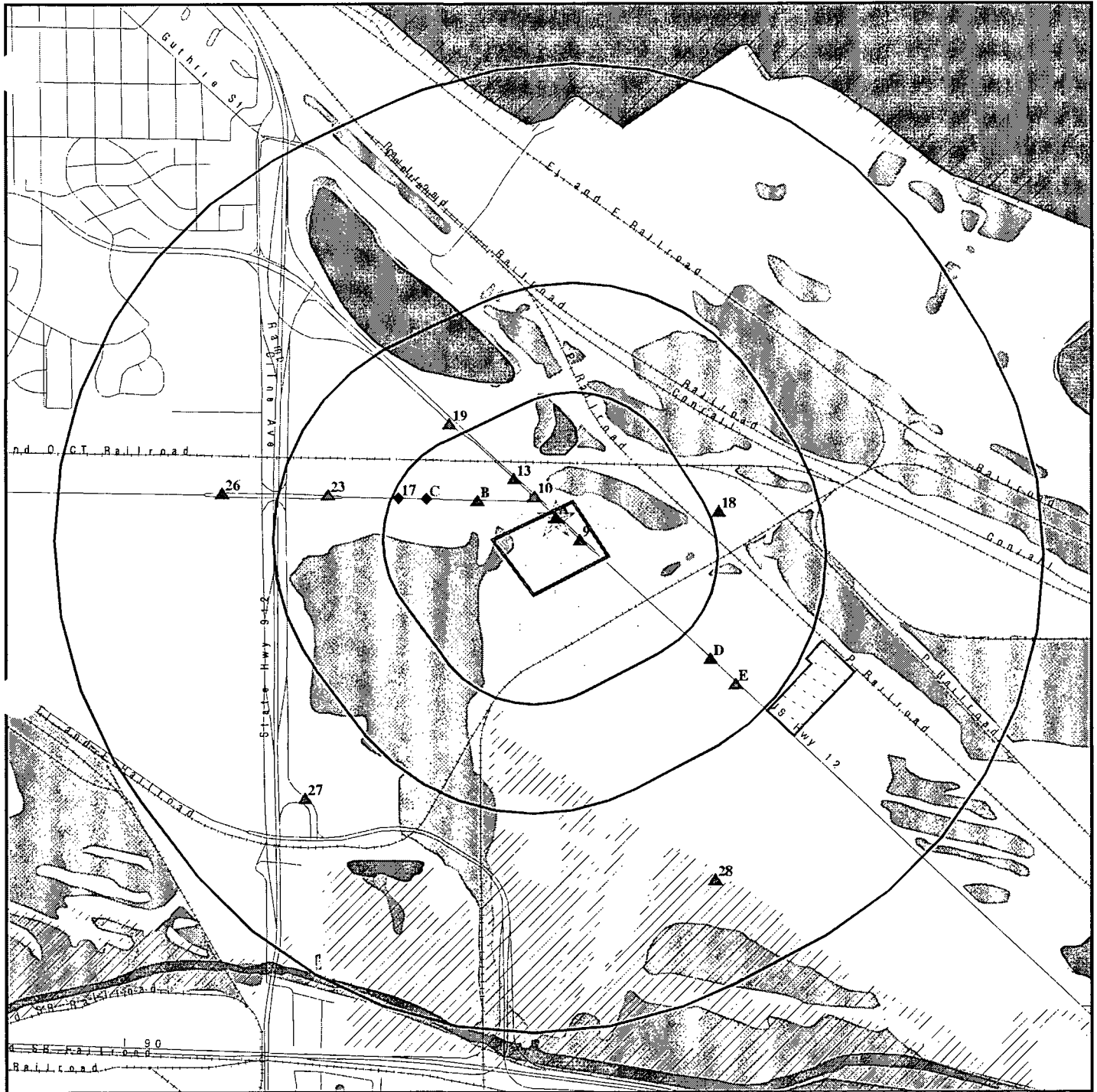
9TH AVE ABANDONED DRUM SITE
HOUSE'S JUNK YARD
GARY SANITARY DISTRICT
INDOT

INDOT

Database(s)

RCRA-SQG, FINDS,
RCRA-TSDF, CORRACTS, IN
MANIFEST, AIRS
CERCLIS
CERCLIS, FINDS
LUST, IN Spills
RCRA-SQG, FINDS, IN
MANIFEST
RCRA-SQG, FINDS, IN
MANIFEST

OVERVIEW MAP - 01940968.2r



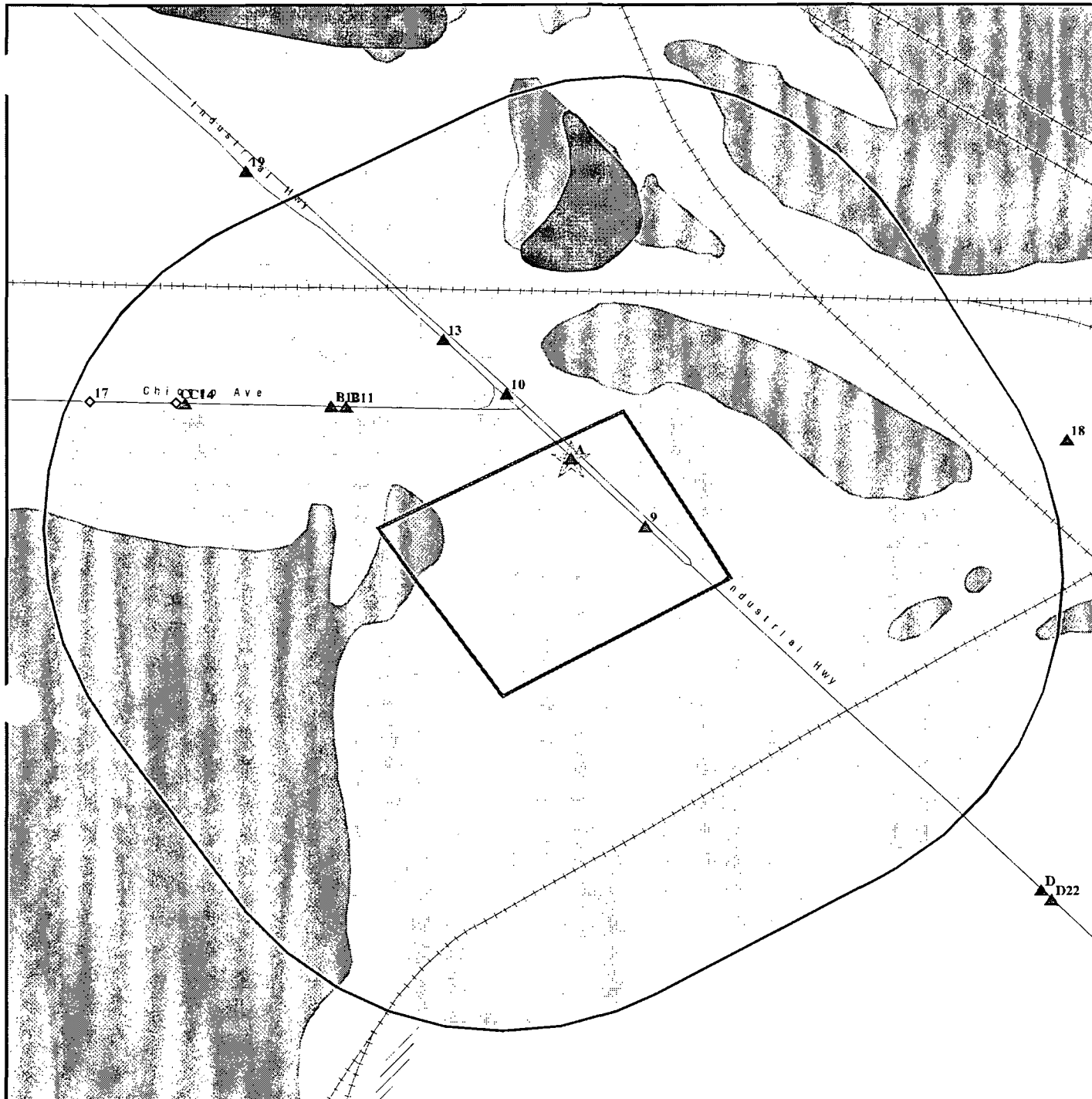
- Target Property**
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA
-  Oil & Gas pipelines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
- 0 1/4

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Conservation Chemical Company
ADDRESS: 6500 Industrial Highway
Gary IN 46406
LAT/LONG: 41.6281 / 87.4198

CLIENT: QEPI
CONTACT: Nivas Vijay
INQUIRY #: 01940968.2r
DATE: May 30, 2007 3:08 pm

DETAIL MAP - 01940968.2r



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Conservation Chemical Company
 ADDRESS: 6500 Industrial Highway
 Gary IN 46406
 LAT/LONG: 41.6281 / 87.4198

CLIENT: QEPI
 CONTACT: Nivas Vijay
 INQUIRY #: 01940968.2r
 DATE: May 30, 2007 3:08 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>FEDERAL RECORDS</u>								
NPL		1.000	0	0	0	1	NR	1
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
CERCLIS	X	0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	1	0	4	NR	NR	5
CORRACTS	X	1.000	1	0	0	2	NR	3
RCRA TSD		0.500	0	0	1	NR	NR	1
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.	X	0.250	3	0	NR	NR	NR	3
ERNS		TP	NR	NR	NR	NR	NR	0
HMIRS	X	TP	NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	1	NR	1
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	1	NR	1
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
DOT OPS		TP	NR	NR	NR	NR	NR	0
ICIS	X	TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
CDL		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
LIENS 2		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS	X	TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
<u>STATE AND LOCAL RECORDS</u>								
State Haz. Waste		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	1	2	1	NR	NR	4
UST		0.250	2	3	NR	NR	NR	5
BULK		0.250	0	0	NR	NR	NR	0
MANIFEST	X	0.250	3	0	NR	NR	NR	3
IN Spills	X	TP	NR	NR	NR	NR	NR	0
AUL		0.500	0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
BROWNFIELDS	X	0.500	0	0	3	NR	NR	3
AIRS		TP	NR	NR	NR	NR	NR	0
TIER 2		TP	NR	NR	NR	NR	NR	0
<u>TRIBAL RECORDS</u>								
INDIAN RESERV		1.000	0	0	0	0	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
<u>EDR PROPRIETARY RECORDS</u>								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number

EPA ID Number

A1
Target
Property
WESTERN SCRAP/BERRY OIL
6500 INDUSTRIAL HIGHWAY
GARY, IN 46406

BROWNFIELDS **S107598786**
N/A

Actual:
590 ft.
Site 1 of 8 in cluster A
IN BROWNFIELD:
Facility ID: 4060016
Project Manager: Not reported

A2
Target
Property
SWIFT TRANSPORTATION
6500 W INDUSTRIAL HWY
GARY, IN 46406

ICIS **1009923442**
N/A

Actual:
590 ft.
Site 2 of 8 in cluster A
ICIS:
EFA Enforcement Action ID: 05-1985-0477
FRS ID: 110009258739
Program ID: FRS 110009258739
Action Name: CONSERVATION CHEMICAL COMPANY
Facility Name: SWIFT TRANSPORTATION
Facility Address: 6500 W INDUSTRIAL HWY
GARY, Indiana 46406
EFA Enforcement Action Type: Civil Judicial Action
Facility County: LAKE
EPA Region #: 5
Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 2819
Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 9999
Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 2819
Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 9999
Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

SWIFT TRANSPORTATION (Continued)

EDR ID Number
EPA ID Number

Database(s)

1009923442

NAIC Code: Not reported
SIC Code: 2819

Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 9999

Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 2819

Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 9999

EFA Enforcement Action ID: 05-1996-0413
FRS ID: 110009258739
Program ID: FRS 110009258739
Action Name: CONSERVATION CHEMICAL CO. OF ILLINOIS, INC.
Facility Name: SWIFT TRANSPORTATION
Facility Address: 6500 W INDUSTRIAL HWY
GARY, Indiana 46406

EFA Enforcement Action Type: CERCLA 122G Admin. Deminimis Cost Recov Settlement (Old)
Facility County: LAKE
EPA Region #: 5

Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 2819

Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 9999

Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 2819

Facility Name: SWIFT TRANSPORTATION

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

SWIFT TRANSPORTATION (Continued)

EDR ID Number
EPA ID Number

Database(s)

1009923442

Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 9999

Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 2819

Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 9999

Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 2819

Facility Name: SWIFT TRANSPORTATION
Address: 6500 W INDUSTRIAL HWY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: 9999

A3

Target 6500 W INDUSTRIAL HWY
Property GARY, IN

HMIRS 2004100467
N/A

Actual:
590 ft.

Site 3 of 8 in cluster A

[Click this hyperlink](#) while viewing on your computer to access
additional HMIRS detail in the EDR Site Report.

A4

Target CONSERVATION CHEMICAL COMPANY
Property 6500 INDUSTRIAL HIGHWAY
GARY, IN 46406

ICIS 1009952956
N/A

Actual:
590 ft.

Site 4 of 8 in cluster A

ICIS:
EFA Enforcement Action ID: 05-2002-0383
FRS ID: 110016661209
Program ID: FRS 110016661209
Action Name: CONSERVATION CHEMICAL COMPANY (CERCLA)
Facility Name: CONSERVATION CHEMICAL COMPANY
Facility Address: 6500 INDUSTRIAL HIGHWAY
GARY, Indiana 46406

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CONSERVATION CHEMICAL COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1009952956

EFA Enforcement Action Type: Bankruptcy
Facility County: LAKE
EPA Region #: 5

Facility Name: CONSERVATION CHEMICAL COMPANY
Address: 6500 INDUSTRIAL HIGHWAY GARY IN 46406
Tribal Indicator: Not reported
Fed Facility: Not reported
NAIC Code: Not reported
SIC Code: Not reported

A5

Target
Property

6500 WEST INDUSTRIAL HIGHWAY
GARY, IN 46406

IN Spills S104903673
N/A

Actual:
590 ft.

Site 5 of 8 in cluster A

SPILL:
Facility ID: 200003070
Incident Date: 03/08/00
Report Date: 03/08/00
Material: Diesel Fuel
Spill Source: Commercial
Recovered Amount: 0
Recovered Units: Not reported
Spilled Amount: 0
Spilled Units: Not reported
Contained: Not reported
Water Affected: Adjacent off-site ponds
Spill Type: Spill
Area Affected: Undetermined
Fish Killed: 0
Public Intake: None

A6

Target
Property

CONSERVATION CHEM CO
6500 INDUSTRIAL HWY
GARY, IN 46406

CERCLIS 1000380450
RCRA-SQG IND040888992
FINDS
CORRACTS
IN MANIFEST
NY MANIFEST

Actual:
590 ft.

Site 6 of 8 in cluster A

CERCLIS:
Site ID: 0501406
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Referred to Removal - NFRAP

CERCLIS Site Contact Name(s):

Contact Name: STEVE FARYAN
Contact Tel: (312) 353-9351
Contact Title: On-Scene Coordinator (OSC)

Contact Name: BOB PAULSON
Contact Tel: (312) 886-0272
Contact Title: Community Involvement Coordinator

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CONSERVATION CHEM CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000380450

CERCLIS Site Alias Name(s):

Alias Name: CONSERVATION CHEM CO
Alias Address: Not reported
LAKE, IN
Alias Name: CONSERVATION CHEM CO
Alias Address: 6500 INDUSTRIAL HWY
GARY, IN 46406

Site Description: Not reported

CERCLIS Assessment History:

Action: DISCOVERY
Date Started: Not reported
Date Completed: 08/01/1982
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 05/01/1984
Priority Level: NFRAP (No Further Remedial Action Planned)

Action: UNILATERAL ADMIN ORDER
Date Started: Not reported
Date Completed: 09/30/1985
Priority Level: Not reported

Action: REMOVAL
Date Started: 10/04/1985
Date Completed: Not reported
Priority Level: Partially Cleaned up

Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: Not reported
Date Completed: 01/27/1987
Priority Level: Not reported

Action: NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started: Not reported
Date Completed: 06/15/1987
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 06/30/1987
Priority Level: High

Action: ISSUE REQUEST LETTERS (104E)
Date Started: Not reported
Date Completed: 01/30/1990
Priority Level: Not reported

Action: CLAIM IN BANKRUPTCY PROCEEDING
Date Started: 01/08/1987
Date Completed: 04/15/1993
Priority Level: Not reported

Action: Notice Letters Issued
Date Started: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CONSERVATION CHEM CO. (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000380450

Date Completed:	09/28/1994
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	09/28/1994
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	10/31/1994
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	10/31/1994
Priority Level:	Not reported
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	11/03/1995
Priority Level:	Not reported
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	05/06/1996
Priority Level:	Not reported
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	09/15/1998
Priority Level:	Not reported
Action:	REMOVAL
Date Started:	04/16/1999
Date Completed:	07/01/1999
Priority Level:	Partially Cleaned up
Action:	POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started:	07/05/1999
Date Completed:	11/27/2001
Priority Level:	Cleaned up
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	08/28/2003
Priority Level:	Not reported
Action:	CONSENT AGREEMENT (ADMINISTRATIVE)
Date Started:	Not reported
Date Completed:	09/10/2003
Priority Level:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CONSERVATION CHEM CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000380450

RCRAInfo Corrective Action Summary:

Event: CA Prioritization, Facility or area was assigned a high corrective action priority.
Event Date: 09/27/1991
Event: RFA Completed
Event Date: 12/31/1986
Event: RFA Determination Of Need For An RFI, RFI is Necessary;
Event Date: 12/31/1986

RCRAInfo:

Owner: CONSERVATION CHEMICAL CO OF ILLINOIS
(312) 734-2441
EPA ID: IND040888992
Contact: JAMES WILLIAMS
(312) 955-3157

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated:	Not reported
Area of Violation:	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
Date Violation Determined:	07/19/1985
Actual Date Achieved Compliance:	09/04/1985
Enforcement Action:	EPA RCRA TO EPA CERCLA ADMINISTRATIVE REFERRAL
Enforcement Action Date:	09/06/1985
Penalty Type:	Not reported
Enforcement Action:	CIVIL ACTION FOR COMPLIANCE
Enforcement Action Date:	01/06/1986
Penalty Type:	Not reported
Enforcement Action:	FINAL CONSENT DECREES
Enforcement Action Date:	01/28/1991
Penalty Type:	Not reported
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	07/24/1985
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
Date Violation Determined:	03/25/1985
Actual Date Achieved Compliance:	01/28/1991
Enforcement Action:	EPA RCRA TO EPA CERCLA ADMINISTRATIVE REFERRAL
Enforcement Action Date:	09/06/1985
Penalty Type:	Not reported
Enforcement Action:	CIVIL ACTION FOR COMPLIANCE
Enforcement Action Date:	01/06/1986
Penalty Type:	Not reported
Enforcement Action:	FINAL CONSENT DECREES
Enforcement Action Date:	01/28/1991
Penalty Type:	Not reported
Enforcement Action:	INITIAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	08/20/1985

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CONSERVATION CHEM CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000380450

Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-GOUNDWATER MONITORING REQUIREMENTS
Date Violation Determined:	03/25/1985
Actual Date Achieved Compliance:	01/28/1991
Enforcement Action:	EPA RCRA TO EPA CERCLA ADMINISTRATIVE REFERRAL
Enforcement Action Date:	09/06/1985
Penalty Type:	Not reported
Enforcement Action:	CIVIL ACTION FOR COMPLIANCE
Enforcement Action Date:	01/06/1986
Penalty Type:	Not reported
Enforcement Action:	FINAL CONSENT DECREES
Enforcement Action Date:	01/28/1991
Penalty Type:	Not reported
Enforcement Action:	INITIAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	08/20/1985
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-GOUNDWATER MONITORING REQUIREMENTS
Date Violation Determined:	03/25/1985
Actual Date Achieved Compliance:	01/28/1991
Enforcement Action:	INITIAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	08/20/1985
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-GOUNDWATER MONITORING REQUIREMENTS
Date Violation Determined:	03/25/1985
Actual Date Achieved Compliance:	01/28/1991
Enforcement Action:	EPA RCRA TO EPA CERCLA ADMINISTRATIVE REFERRAL
Enforcement Action Date:	09/06/1985
Penalty Type:	Not reported
Enforcement Action:	CIVIL ACTION FOR COMPLIANCE
Enforcement Action Date:	01/06/1986
Penalty Type:	Not reported
Enforcement Action:	FINAL CONSENT DECREES
Enforcement Action Date:	01/28/1991
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS
Date Violation Determined:	03/25/1985
Actual Date Achieved Compliance:	01/28/1991
Enforcement Action:	EPA RCRA TO EPA CERCLA ADMINISTRATIVE REFERRAL
Enforcement Action Date:	09/06/1985
Penalty Type:	Not reported
Enforcement Action:	CIVIL ACTION FOR COMPLIANCE
Enforcement Action Date:	01/06/1986
Penalty Type:	Not reported
Enforcement Action:	FINAL CONSENT DECREES
Enforcement Action Date:	01/28/1991
Penalty Type:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CONSERVATION CHEM CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000380450

Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	02/13/1985
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS
Date Violation Determined:	03/25/1985
Actual Date Achieved Compliance:	01/28/1991
Enforcement Action:	EPA RCRA TO EPA CERCLA ADMINISTRATIVE REFERRAL
Enforcement Action Date:	09/06/1985
Penalty Type:	Not reported
Enforcement Action:	CIVIL ACTION FOR COMPLIANCE
Enforcement Action Date:	01/06/1986
Penalty Type:	Not reported
Enforcement Action:	FINAL CONSENT DECREES
Enforcement Action Date:	01/28/1991
Penalty Type:	Not reported
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	07/24/1985
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
Date Violation Determined:	02/12/1985
Actual Date Achieved Compliance:	09/04/1985
Enforcement Action:	EPA RCRA TO EPA CERCLA ADMINISTRATIVE REFERRAL
Enforcement Action Date:	09/06/1985
Penalty Type:	Not reported
Enforcement Action:	CIVIL ACTION FOR COMPLIANCE
Enforcement Action Date:	01/06/1986
Penalty Type:	Not reported
Enforcement Action:	FINAL CONSENT DECREES
Enforcement Action Date:	01/28/1991
Penalty Type:	Not reported
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	02/13/1985
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-GOUNDWATER MONITORING REQUIREMENTS
Date Violation Determined:	01/04/1984
Actual Date Achieved Compliance:	01/28/1991
Enforcement Action:	EPA RCRA TO EPA CERCLA ADMINISTRATIVE REFERRAL
Enforcement Action Date:	09/06/1985
Penalty Type:	Not reported
Enforcement Action:	CIVIL ACTION FOR COMPLIANCE
Enforcement Action Date:	01/06/1986
Penalty Type:	Not reported
Enforcement Action:	FINAL CONSENT DECREES
Enforcement Action Date:	01/28/1991
Penalty Type:	Not reported

There are 9 violation record(s) reported at this site:

Evaluation

Area of Violation

Date of
Compliance

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number

EPA ID Number

CONSERVATION CHEM CO (Continued)

1000380450

Compliance Evaluation Inspection	TSD-GOUNDWATER MONITORING REQUIREMENTS	19910128
Compliance Evaluation Inspection	TSD-GOUNDWATER MONITORING REQUIREMENTS	19910128
	TSD-GOUNDWATER MONITORING REQUIREMENTS	19910128
Compliance Schedule Evaluation	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	19850904
Compliance GW Monitoring Evaluation	TSD-GOUNDWATER MONITORING REQUIREMENTS	19910128
	TSD-GOUNDWATER MONITORING REQUIREMENTS	19910128
Compliance Evaluation Inspection	TSD-OTHER REQUIREMENTS	19910128
	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	19910128
	TSD-OTHER REQUIREMENTS	19910128
	TSD-GOUNDWATER MONITORING REQUIREMENTS	19910128
Financial Record Review	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	19850904
Compliance GW Monitoring Evaluation	TSD-GOUNDWATER MONITORING REQUIREMENTS	19910128

FINDS:

Other Pertinent Environmental Activity Identified at Site

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and its Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (I-DEM) has implemented the Indiana-Facility Registry System (I-FRS). The I-FRS provides the interface and processes to link facility data monitored by multiple State and EPA program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CONSERVATION CHEM CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000380450

CORRACTS:

EPA ID: IND040888992
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/27/1991
Action: CA075HI - CA Prioritization, Facility or area was assigned a high
corrective action priority
NAICS Code(s): 484121 48849
General Freight Trucking, Long-Distance, Truckload
Other Support Activities for Road Transportation

EPA ID: IND040888992
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 12/31/1986
Action: CA050 - RFA Completed
NAICS Code(s): 484121 48849
General Freight Trucking, Long-Distance, Truckload
Other Support Activities for Road Transportation

EPA ID: IND040888992
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 12/31/1986
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): 484121 48849
General Freight Trucking, Long-Distance, Truckload
Other Support Activities for Road Transportation

IN MANIFEST:

EPA ID: IND040888992
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND040888992
Generator Type: 0
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6500 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: WATSON
Contact First Name: MIKE
Contact Telephone: 219-944-5864
Contact Type: A

EPA ID #: IND040888992
Generator Type: Not reported
Generator Status: Non Active
Transporter Type: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CONSERVATION CHEM CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000380450

Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6500 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: WATSON
Contact First Name: MIKE
Contact Telephone: 219-944-5864
Contact Type: A

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Transporters Used: Not reported

EPA ID: IND040888992
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND040888992
Generator Type: 0
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6500 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CONSERVATION CHEM CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000380450

Handler Mailing Zip: 46406
Contact Last Name: WATSON
Contact First Name: MIKE
Contact Telephone: 219-944-5864
Contact Type: A

EPA ID #: IND040888992
Generator Type: Not reported
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6500 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: WATSON
Contact First Name: MIKE
Contact Telephone: 219-944-5864
Contact Type: A

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Transporters Used: Not reported

NY MANIFEST:

Document ID: NYB4410054
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: 0049

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CONSERVATION CHEM CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000380450

Trans2 State ID: Not reported
Generator Ship Date: 920518
Trans1 Recv Date: 920518
Trans2 Recv Date: 920528
TSD Site Recv Date: 920529
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: IND040888992
Trans1 EPA ID: ILD981957236
Trans2 EPA ID: ILD981957236
TSD ID: NYD049836679
Waste Code: B007 - OTHER MISCELLANEOUS PCB WASTES
Quantity: 01260
Units: K - Kilograms (2.2 pounds)
Number of Containers: 001
Container Type: CM - Metal boxes, cases, roll-offs
Handling Method: L Landfill.
Specific Gravity: 100
Year: 92
Facility Type: Generator
EPA ID: IND040888992
Facility Name: USEPA
Facility Address: 6500 INDUSTRIAL HIGHWAY
Facility City: GARY
Facility Zip 4: Not reported
Country: Not reported
County: Not reported
Mailing Name: USEPA
Mailing Contact: WILLIAM SIMES
Mailing Address: 77 W JACKSON BLVD HSE5J
Mailing City: CHICAGO
Mailing State: IL
Mailing Zip: 60604
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 312-886-3337

A7
Target
Property

CONSERVATION CHEMICAL COMPANY
6500 INDUSTRIAL HIGHWAY
GARY, IN 46406

FINDS 1007122486
110016661209

Actual:
590 ft.

Site 7 of 8 in cluster A

FINDS:

Other Pertinent Environmental Activity Identified at Site

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and its Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CONSERVATION CHEMICAL COMPANY (Continued)

EDR ID Number
EPA ID Number

1007122486

that support Compliance and Enforcement programs. These include;
Incident Tracking, Compliance Assistance, and Compliance Monitoring.

A8
Target
Property

6500 INDUSTRIAL HIGHWAY
GARY, IN 46402

IN Spills S105469358
N/A

Site 8 of 8 in cluster A

Actual:
590 ft.

SPILL:
Facility ID: 200203239
Incident Date: / /
Report Date: 03/27/02
Material: UNKOWN
Spill Source: Individual
Recovered Amount: 0
Recovered Units: Not reported
Spilled Amount: 550
Spilled Units: Gallons
Contained: Not reported
Water Affected: Not reported
Spill Type: Other
Area Affected: Not reported
Fish Killed: 0
Public Intake: Not reported

NPL
Region
SE
1/2-1
2676 ft.

MIDCO II
5900 INDUSTRIAL HWY
GARY, IN 46406

CERCLIS 1000825237
FINDS IND980679559
NPL
RCRA-LQG
ROD
IN MANIFEST
US ENG CONTROLS
US INST CONTROL

CERCLIS:
Site ID: 0501800
Federal Facility: Not a Federal Facility
NPL Status: Currently on the Final NPL
Non NPL Status: Not reported

CERCLIS Site Contact Name(s):

Contact Name: RICHARD BOICE
Contact Tel: (312) 886-4740
Contact Title: Remedial Project Manager (RPM)

Contact Name: STUART HILL
Contact Tel: (312) 886-0689
Contact Title: Community Involvement Coordinator

CERCLIS Site Alias Name(s):

Alias Name: MIDCO II
Alias Address: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

EDR ID Number
EPA ID Number
Database(s)

MIDCO II (Continued)

1000825237

Alias Name: LAKE, IN
MIDCO II
Alias Address: ADDRESS UNREPORTED
GARY, IN 46402
Alias Name: MIDCO II
Alias Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

Site Description: The primary Midco II source area occupies approximately seven acres located at 5900 Industrial Highway, Gary, Indiana. Midco II is bordered by a former auto salvage yard on the northwest, a ditch and CSX railroad right-of-way on the northeast, vacant filled-in land now owned by the Gary-Chicago Airport Authority on the southeast, and Industrial Highway on the southwest. Midco II is 1.14 miles south of Lake Michigan, and 0.85 miles north of the Grand Calumet River and the Little Calumet River. The only aquifer of concern at Midco II is the Calumet aquifer, whose water table is generally only about eight feet below ground surface. The Calumet aquifer is approximately 45 feet thick at Midco II and is underlain by about 62 feet of soft silty clay and silty clay loam, and six feet of hard silty till. Waste operations at Midco II were initiated during the summer of 1976. In January 1977 (following a major fire at Midco I), Midwest Industrial Waste Disposal Company was incorporated ostensibly to operate Midco II, and the Midco I operations were transferred to Midco II. Operations included temporary bulk liquid and drum storage of waste and reclaimable materials, neutralization of acids and caustics, and on-site disposal of liquids via dumping into pits, which allowed seepage of liquids into groundwater and into the ditch. One of these pits, called the "filter bed", had an overflow pipe leading into the ditch. By April 1977, it was estimated that 12,000 to 15,000 55-gallon drums of waste materials were stored on-site. In addition, there were 10 above and below ground storage tanks used to store liquid wastes. The drums were stacked three high, and along with the tanks were badly deteriorated and leaking. The wastes stored on the site included oils, oil sludges, chlorinated solvents, paint solvents, paint sludges, acids, and spent cyanide solutions. Also present were highly contaminated soils, an open dump containing drums, tires, and wood wastes; and an excavated pit containing unidentified sludges. On August 15, 1977, a major fire at Midco II destroyed equipment, buildings, and damaged or burned out an estimated 50,000 to 60,000 drums. In August 1981, EPA installed a 10-foot high fence around Midco II. In two separate removal actions in 1984 and 1985, EPA removed all of the drums, tanks, and surface wastes. Also in 1985, EPA excavated contaminated soil and material from the sludge pit and filter bed, which were highly contaminated by polychlorinated biphenyls (PCBs) and cyanide. The sludge pit and filter bed contents were temporarily contained on Midco II. The sludge pit and filter bed contents were removed from Midco II and disposed off-site, in a number of removal actions conducted between 1985 and 1989. Midco II was placed on the National Priorities List in October 1984. Shortly after EPA initiated the Remedial Investigation/Feasibility Study (RI/FS), EPA reached a settlement with a group of potential generators to conduct the RI/FS and reimburse EPA costs. The group of generators conducted the RI/FS from 1985 through 1989. In June 1989, EPA issued the initial Record of Decision (ROD). The 1992 ROD Amendment, amended the Selected Remedy primarily to reduce soil treatment to only the most highly contaminated soils that were considered to constitute the principal threats. The 1992 ROD Amendment also included the following changes: eliminating the option of deep well injection without treatment; eliminating the option of ex-situ solidification/stabilization (S/S); changing and better defining performance standards for soil vapor extraction (SVE) and S/S; adding new air emission control requirements and limitations; providing more specificity regarding requirements for deep well injection, sediment excavation and handling, procedures for calculation of Sediment/Soil and Groundwater

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

Database(s)

EDR ID Number
EPA ID Number

1000825237

cleanup action levels (CALs), construction requirements for the site cover, procedures for off-site disposal, and methods for protection of wetlands; identifying a sequence for the remediation work; requiring construction of the site cover over the entire source area; and language identifying contingencies in case it is technically impractical to achieve the Groundwater CALs. On June 23, 1992, a Consent Decree between EPA and Settling Defendants was entered in Federal Court. This Consent Decree requires the Settling Defendants to implement the Selected Remedy, and to reimburse EPA for past costs and future response costs. The Settling Defendants were generators of the wastes disposed at Midco II. The Settling Defendants incorporated the Midco Remedial Corporation (MRC) to implement the Selected Remedy at Midco II. The MRC implemented access and deed restrictions during 1992 and 1993. In 1993, the MRC conducted partial excavation of the ditch sediments/soils and consolidated and stored the excavated sediments/soils on-site under a flexible membrane liner. However, most of the contaminated sediments/soils in the ditch were left in place because there was insufficient space above the MATs to store all of the contaminated sediments/soils and because it was impractical to handle the volume of water that. An Explanation of Significant Differences addressing OU 1 was completed in September 2004.

CERCLIS Assessment History:

Action: DISCOVERY
Date Started: Not reported
Date Completed: 08/01/1982
Priority Level: Not reported

Action: REMOVAL
Date Started: 04/23/1984
Date Completed: 05/14/1984
Priority Level: Stabilized

Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 08/01/1984
Priority Level: High

Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: Not reported
Date Completed: 08/01/1984
Priority Level: Not reported

Action: PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started: Not reported
Date Completed: 10/15/1984
Priority Level: Not reported

Action: NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started: Not reported
Date Completed: 11/15/1984
Priority Level: Not reported

Action: REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS
Date Started: 11/15/1984
Date Completed: 05/15/1985
Priority Level: Not reported

Action: COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/23/1983

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000825237

Date Completed:	06/19/1985
Priority Level:	Not reported
Action:	SECTION 106 107 LITIGATION
Date Started:	05/15/1985
Date Completed:	06/19/1985
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	08/01/1985
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	Not reported
Date Completed:	08/01/1985
Priority Level:	Not reported
Action:	FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started:	Not reported
Date Completed:	06/10/1986
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	11/28/1986
Priority Level:	High
Action:	Special Notice Issued
Date Started:	Not reported
Date Completed:	05/09/1989
Priority Level:	Not reported
Action:	REMOVAL
Date Started:	12/19/1984
Date Completed:	05/26/1989
Priority Level:	Stabilized
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	06/19/1985
Date Completed:	06/30/1989
Priority Level:	Not reported
Action:	RECORD OF DECISION
Date Started:	Not reported
Date Completed:	06/30/1989
Priority Level:	Not reported
Action:	UNILATERAL ADMIN ORDER
Date Started:	Not reported
Date Completed:	11/15/1989
Priority Level:	Not reported
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	05/09/1989
Date Completed:	06/11/1990

Map ID
Direction
Distance
Distance (ft.)
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

Priority Level:	Not reported
Action:	REMEDIAL DESIGN
Date Started:	06/15/1990
Date Completed:	Not reported
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	06/14/1990
Date Completed:	06/15/1990
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	10/02/1989
Date Completed:	11/21/1990
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	03/22/1991
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	08/06/1991
Date Completed:	08/08/1991
Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	01/31/1992
Priority Level:	Not reported
Action:	RECORD OF DECISION AMENDMENT
Date Started:	Not reported
Date Completed:	04/13/1992
Priority Level:	Final Remedy Selected at Site
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	04/14/1992
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	04/02/1992
Date Completed:	06/23/1992
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	01/10/1992
Date Completed:	06/23/1992
Priority Level:	Multi-Site-First Site
Action:	CONSENT DECREE
Date Started:	01/10/1991
Date Completed:	06/23/1992
Priority Level:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

Database(s)

EDR ID Number
EPA ID Number

1000825237

Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	01/15/1991
Date Completed:	06/23/1992
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	09/27/1993
Date Completed:	09/27/1993
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	06/23/1992
Date Completed:	06/24/1994
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	08/23/1993
Date Completed:	06/10/1997
Priority Level:	Not reported
Action:	TREATABILITY STUDY
Date Started:	03/27/1990
Date Completed:	09/30/1997
Priority Level:	Not reported
Action:	TREATABILITY STUDY
Date Started:	03/27/1990
Date Completed:	09/30/1997
Priority Level:	Not reported
Action:	FIVE-YEAR REVIEW
Date Started:	07/09/1998
Date Completed:	10/29/1998
Priority Level:	Not reported
Action:	FIVE YEAR REVIEW REPORT DUE
Date Started:	Not reported
Date Completed:	10/29/1998
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	09/03/2003
Date Completed:	Not reported
Priority Level:	Final RA Report
Action:	FIVE-YEAR REVIEW
Date Started:	09/04/2003
Date Completed:	05/17/2004
Priority Level:	Not reported
Action:	FIVE YEAR REVIEW REPORT DUE
Date Started:	Not reported
Date Completed:	05/17/2004
Priority Level:	Not reported
Action:	Explanation Of Significant Differences
Date Started:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

Date Completed:	09/30/2004
Priority Level:	Not reported
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	02/09/1998
Date Completed:	11/18/2005
Priority Level:	Not reported
Action:	FIVE YEAR REVIEW REPORT DUE
Date Started:	Not reported
Date Completed:	Not reported
Priority Level:	Not reported
Action:	FIVE-YEAR REVIEW
Date Started:	Not reported
Date Completed:	Not reported
Priority Level:	Not reported

FINDS:

Other Pertinent Environmental Activity Identified at Site

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (I-DEM) has implemented the Indiana-Facility Registry System (I-FRS). The I-FRS provides the interface and processes to link facility data monitored by multiple State and EPA program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node

NPL:

EPA ID:	IND980679559
EPA Region:	05
Federal:	General
Final Date:	06/10/1986

Category Details:

NPL Status:	Currently on the Final NPL
Category Description:	Depth To Aquifer-<= 10 Feet

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000825237

Category Value: 6

NPL Status: Currently on the Final NPL
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value: 450

Site Details:

Site Name: MIDCO II
Site Status: Final
Status Date: 06/10/86
Site City: GARY
Site State: IN
Federal Site: Not a Federal Facility
HRS Score: 30.16
GW Score: 51.02
SW Score: 10.91
Air Score: Not reported
Soil Score: Not reported
DC Score: 25.00
FE Score: 37.50

Substance Details:

NPL Status: Currently on the Final NPL
Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Currently on the Final NPL
Substance ID: A046
Substance: POLYCHLORINATED BIPHENYLS
CAS #: 1336-36-3
Pathway: GROUND WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: A046
Substance: POLYCHLORINATED BIPHENYLS
CAS #: 1336-36-3
Pathway: SURFACE WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: D006
Substance: CADMIUM (CD)
CAS #: 7440-43-9
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: D008
Substance: LEAD (PB)
CAS #: 7439-92-1
Pathway: GROUND WATER PATHWAY
Scoring: 2

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

NPL Status: Currently on the Final NPL
Substance ID: P030
Substance: CYANIDES (SOLUBLE SALTS)
CAS #: Not reported
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U002
Substance: ACETONE
CAS #: 67-64-1
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U019
Substance: BENZENE
CAS #: 71-43-2
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: U080
Substance: METHYLENE CHLORIDE
CAS #: 75-09-2
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U159
Substance: METHYL ETHYL KETONE
CAS #: 78-93-3
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U161
Substance: METHYL ISOBUTYL KETONE
CAS #: 108-10-1
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U165
Substance: NAPHTHALENE
CAS #: 91-20-3
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: U220
Substance: TOLUENE
CAS #: 108-88-3
Pathway: GROUND WATER PATHWAY
Scoring: 2

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000825237

Summary Details:

Conditions at proposal October 15, 1984): The Midwest Solvent Recovery Co., Inc. MIDCO II Site occupies approximately 7 acres across the highway from the airport in Gary, Lake County, Indiana. The area is primarily industrial. MIDCOII recycled solvents and disposed of industrial waste at the site using the following methods: temporary storage of waste and reclaimable material in tanks and drums and disposal of wastes via open dumping in trenches, sludge pits, and filterpits. The company operated until August 17, 1977, when a fire burned most of the above-ground tanks and drums containing wastes. Following the fire, the company abandoned the site without cleanup. Several thousand drums containing burned residues were left on-site, along with several tanks. Soils, ground water, and possibly surface water are contaminated, according to tests conducted by EPA. About 479,000 people live within 3 miles of the site. Status June 10, 1986): Between January and March 1985, EPA used CERCLA emergency funds to remove 85,500 drums and drum remnants, which cleared the site of surface wastes. In July and August, EPA excavated approximately 5,000 cubic yards of highly contaminated soil from a former sludge pit and filter bed and piled the solidified soil on-site. On June 19, 1985, EPA reached a settlement with a group of parties potentially responsible for wastes associated with the site to 1) reimburse the Government 3.1million for past costs and 2) perform a remedial investigation/feasibility study RI/FS) to determine the type and extent of subsurface and off-site contamination and identify alternatives for remedial action. The Consent Decree became effective in August 1985. All of the piles of contaminated soil have not been removed from the site because of difficulty in obtaining approval for disposal. Monitoring wells have been installed and sampling is underway for the RI/FS.

Site Status Details:

NPL Status: Final
Proposed Date: 10/15/1984
Final Date: 06/10/1986
Deleted Date: Not reported

Narratives Details:

NPL Name: MIDCO II
City: GARY
State: IN

RCRAInfo:

Owner: MIDCO II
(708) 940-7200
EPA ID: IND980679559
Contact: Not reported
Classification: Large Quantity Generator
TSDF Activities: Not reported

BIENNIAL REPORTS:

Last Biennial Reporting Year: 2005

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
F001	4109.00	F002	4109.00
F003	4109.00	F005	4109.00
F007	2134.00	F008	2134.00

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

F009 2134.00

Violation Status: No violations found

ROD:

Full-text of USEPA Record of Decision(s) is available from EDR.

IN MANIFEST:

EPA ID: IND980679559
Flag: SHIP
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND980679559
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: C/O ENVIRON
Handler Mailing City: DEERFIELD
Handler Mailing State: IL
Handler Mailing Zip: 60015
Contact Last Name: HUTCHENS
Contact First Name: RONALD E
Contact Telephone: 847-444-9200
Contact Type: B

EPA ID #: IND980679559
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: C/O ENVIRON
Handler Mailing City: DEERFIELD
Handler Mailing State: IL
Handler Mailing Zip: 60015
Contact Last Name: HUTCHENS
Contact First Name: RONALD E
Contact Telephone: 847-444-9200
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTERS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 24
TSD Facility EPA ID: MID000724831
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTERS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: F002
Tons Of Waste Shipped Year: 24
TSD Facility EPA ID: MID000724831
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTER CAKE
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 65
TSD Facility EPA ID: ILD010284248
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTER CAKE
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: F002
Tons Of Waste Shipped Year: 65
TSD Facility EPA ID: ILD010284248
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: SPENT ACTIVATED CARBON GENERATED FROM THE PILOT TESTING OF SOIL VAPOR EXTRACTION; HALOGENATED AND NON HALOGENATED SOLVENTS
Shipped File Page Number: 4
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 0.9875
TSD Facility EPA ID: PAD987270725
Facility Address 2: Not reported
IN MANIFEST SHIPPER: Has 9 more record(s) for this section. Please contact your EDR Account Executive for more information

MANIFEST TRA :

Report Year: 2004
Generator EPA ID: IND980679559
Page Number of Report: 1

Map ID
Direction
Distance
Distance (ft.)
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

Transporter's EPA ID: MI0000263871
Num Of Transporters Used: 1

Report Year: 2004
Generator EPA ID: IND980679559
Page Number of Report: 2
Transporter's EPA ID: ILR000106211
Num Of Transporters Used: 1

EPA ID: IND980679559
Flag: SHIP
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND980679559
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: C/O ENVIRON
Handler Mailing City: DEERFIELD
Handler Mailing State: IL
Handler Mailing Zip: 60015
Contact Last Name: HUTCHENS
Contact First Name: RONALD E
Contact Telephone: 847-444-9200
Contact Type: B

EPA ID #: IND980679559
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: C/O ENVIRON
Handler Mailing City: DEERFIELD
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Handler Mailing Zip: 60015
Contact Last Name: HUTCHENS
Contact First Name: RONALD E
Contact Telephone: 847-444-9200
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

MANIFEST SHIPPER:

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTERS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 24
TSD Facility EPA ID: MID000724831
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTERS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: F002
Tons Of Waste Shipped Year: 24
TSD Facility EPA ID: MID000724831
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTER CAKE
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 65
TSD Facility EPA ID: ILD010284248
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTER CAKE
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: F002
Tons Of Waste Shipped Year: 65
TSD Facility EPA ID: ILD010284248
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: SPENT ACTIVATED CARBON GENERATED FROM THE PILOT TESTING OF SOIL VAPOR EXTRACTION; HALOGENATED AND NON HALOGENATED SOLVENTS
Shipped File Page Number: 4
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 0.9875
TSD Facility EPA ID: PAD987270725
Facility Address 2: Not reported
IN MANIFEST SHIPPER: Has 9 more record(s) for this section. Please contact your EDR Account Executive for more information

MANIFEST TRA :

Report Year: 2004

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

Generator EPA ID: IND980679559
Page Number of Report: 1
Transporter's EPA ID: MI0000263871
Num Of Transporters Used: 1

Report Year: 2004
Generator EPA ID: IND980679559
Page Number of Report: 2
Transporter's EPA ID: ILR000106211
Num Of Transporters Used: 1

EPA ID: IND980679559
Flag: SHIP
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND980679559
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: C/O ENVIRON
Handler Mailing City: DEERFIELD
Handler Mailing State: IL
Handler Mailing Zip: 60015
Contact Last Name: HUTCHENS
Contact First Name: RONALD E
Contact Telephone: 847-444-9200
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Generator Type: LQG
Generator Status: Active
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Handler Mailing Zip: 60015
Contact Last Name: HUTCHENS
Contact First Name: RONALD E
Contact Telephone: 847-444-9200
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

EDR ID Number
EPA ID Number

Database(s)

Unit of Measure: Not reported

1000825237

MANIFEST SHIPPER:

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTERS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 24
TSD Facility EPA ID: MID000724831
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTERS
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EPA ID: IND980679559
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Shipped File Page Number: 4
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 0.9875
TSD Facility EPA ID: PAD987270725
Facility Address 2: Not reported
IN MANIFEST SHIPPER: Has 9 more record(s) for this section. Please contact your EDR Account Executive for more information

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

Database(s)

EDR ID Number
EPA ID Number

1000825237

MANIFEST TRA :

Report Year: 2004
Generator EPA ID: IND980679559
Page Number of Report: 1
Transporter's EPA ID: MI0000263871
Num Of Transporters Used: 1

Report Year: 2004
Generator EPA ID: IND980679559
Page Number of Report: 2
Transporter's EPA ID: ILR000106211
Num Of Transporters Used: 1

EPA ID: IND980679559
Flag: SHIP
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND980679559
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: C/O ENVIRON
Handler Mailing City: DEERFIELD
Handler Mailing State: IL
Handler Mailing Zip: 60015
Contact Last Name: HUTCHENS
Contact First Name: RONALD E
Contact Telephone: 847-444-9200
Contact Type: B

EPA ID #: IND980679559
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: C/O ENVIRON
Handler Mailing City: DEERFIELD
Handler Mailing State: IL
Handler Mailing Zip: 60015
Contact Last Name: HUTCHENS
Contact First Name: RONALD E
Contact Telephone: 847-444-9200
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000825237

Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTERS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 24
TSD Facility EPA ID: MID000724831
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTERS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: F002
Tons Of Waste Shipped Year: 24
TSD Facility EPA ID: MID000724831
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTER CAKE
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 65
TSD Facility EPA ID: ILD010284248
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTER CAKE
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: F002
Tons Of Waste Shipped Year: 65
TSD Facility EPA ID: ILD010284248
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: SPENT ACTIVATED CARBON GENERATED FROM THE PILOT TESTING OF SOIL VAPOR EXTRACTION; HALOGENATED AND NON HALOGENATED SOLVENTS
Shipped File Page Number: 4
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 0.9875
TSD Facility EPA ID: PAD987270725
Facility Address 2: Not reported
IN MANIFEST SHIPPER: Has 9 more record(s) for this section. Please contact your EDR Account Executive for more information

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

MANIFEST TRA :

Report Year: 2004
Generator EPA ID: IND980679559
Page Number of Report: 1
Transporter's EPA ID: MI0000263871
Num Of Transporters Used: 1

Report Year: 2004
Generator EPA ID: IND980679559
Page Number of Report: 2
Transporter's EPA ID: ILR000106211
Num Of Transporters Used: 1

EPA ID: IND980679559
Flag: SHIP
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND980679559
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: C/O ENVIRON
Handler Mailing City: DEERFIELD
Handler Mailing State: IL
Handler Mailing Zip: 60015
Contact Last Name: HUTCHENS
Contact First Name: RONALD E
Contact Telephone: 847-444-9200
Contact Type: B

EPA ID #: IND980679559
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: C/O ENVIRON
Handler Mailing City: DEERFIELD
Handler Mailing State: IL
Handler Mailing Zip: 60015
Contact Last Name: HUTCHENS
Contact First Name: RONALD E
Contact Telephone: 847-444-9200
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000825237

Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTERS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 24
TSD Facility EPA ID: MID000724831
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTERS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: F002
Tons Of Waste Shipped Year: 24
TSD Facility EPA ID: MID000724831
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTER CAKE
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 65
TSD Facility EPA ID: ILD010284248
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: HAZARDOUS WASTE SOLID NOS WASTE FILTER CAKE
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: F002
Tons Of Waste Shipped Year: 65
TSD Facility EPA ID: ILD010284248
Facility Address 2: Not reported

EPA ID: IND980679559
Waste Description Shipped: SPENT ACTIVATED CARBON GENERATED FROM THE PILOT TESTING OF SOIL VAPOR EXTRACTION; HALOGENATED AND NON HALOGENATED SOLVENTS
Shipped File Page Number: 4
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: F001
Tons Of Waste Shipped Year: 0.9875
TSD Facility EPA ID: PAD987270725
Facility Address 2: Not reported
IN MANIFEST SHIPPER: Has 9 more record(s) for this section. Please contact your EDR Account Executive for more information

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

Database(s)

EDR ID Number
EPA ID Number

1000825237

MANIFEST TRA :

Report Year: 2004
Generator EPA ID: IND980679559
Page Number of Report: 1
Transporter's EPA ID: MI0000263871
Num Of Transporters Used: 1

Report Year: 2004
Generator EPA ID: IND980679559
Page Number of Report: 2
Transporter's EPA ID: ILR000106211
Num Of Transporters Used: 1

[Click this hyperlink](#) while viewing on your computer to access
11 additional IN MANIFEST: record(s) in the EDR Site Report.

US ENG CONTROLS:

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

EPA Region: 05
County: LAKE
Event Code: Not reported
Actual Date: Not reported

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

EPA Region: 05
County: LAKE
Event Code: Not reported
Actual Date: Not reported

EPA ID: IND980679559
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Name: MIDCO II
Address: 5900 INDUSTRIAL HIGHWAY
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Event Code: Not reported
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EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

EPA Region: 05
County: LAKE
Event Code: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

Actual Date:	Not reported
EPA ID:	IND980679559
Site ID:	0501800
Name:	MIDCO II
Address:	5900 INDUSTRIAL HIGHWAY GARY, IN 46406
EPA Region:	05
County:	LAKE
Event Code:	Not reported
Actual Date:	Not reported
EPA ID:	IND980679559
Site ID:	0501800
Name:	MIDCO II
Address:	5900 INDUSTRIAL HIGHWAY GARY, IN 46406
EPA Region:	05
County:	LAKE
Event Code:	Not reported
Actual Date:	Not reported
EPA ID:	IND980679559
Site ID:	0501800
Name:	MIDCO II
Address:	5900 INDUSTRIAL HIGHWAY GARY, IN 46406
EPA Region:	05
County:	LAKE
Event Code:	Not reported
Actual Date:	Not reported
EPA ID:	IND980679559
Site ID:	0501800
Name:	MIDCO II
Address:	5900 INDUSTRIAL HIGHWAY GARY, IN 46406
EPA Region:	05
County:	LAKE
Event Code:	Not reported
Actual Date:	Not reported
EPA ID:	IND980679559
Site ID:	0501800
Name:	MIDCO II
Address:	5900 INDUSTRIAL HIGHWAY GARY, IN 46406
EPA Region:	05
County:	LAKE
Event Code:	Not reported
Actual Date:	Not reported
EPA ID:	IND980679559
Site ID:	0501800
Name:	MIDCO II
Address:	5900 INDUSTRIAL HIGHWAY GARY, IN 46406

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

EPA Region: 05
County: LAKE
Event Code: Not reported
Actual Date: Not reported

EPA ID: IND980679559
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Name: MIDCO II
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EPA ID: IND980679559
Site ID: 0501800

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000825237

Name: MIDCO II
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406
EPA Region: 05
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Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

EPA ID: IND980679559
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Actual Date: Not reported

EPA ID: IND980679559
Site ID: 0501800
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 GARY, IN 46406

EPA Region: 05
County: LAKE

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000825237

Event Code:	Not reported
Actual Date:	Not reported
EPA ID:	IND980679559
Site ID:	0501800
Name:	MIDCO II
Address:	5900 INDUSTRIAL HIGHWAY GARY, IN 46406
EPA Region:	05
County:	LAKE
Event Code:	Not reported
Actual Date:	Not reported
EPA ID:	IND980679559
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Actual Date:	Not reported
EPA ID:	IND980679559
Site ID:	0501800
Name:	MIDCO II
Address:	5900 INDUSTRIAL HIGHWAY

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

MIDCO II (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000825237

GARY, IN 46406
EPA Region: 05
County: LAKE
Event Code: Not reported
Actual Date: Not reported

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

EPA Region: 05
County: LAKE
Event Code: Not reported
Actual Date: Not reported

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

EPA Region: 05
County: LAKE
Event Code: Not reported
Actual Date: Not reported

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

EPA Region: 05
County: LAKE
Event Code: Not reported
Actual Date: Not reported

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

EPA Region: 05
County: LAKE
Event Code: Not reported
Actual Date: Not reported

Action ID: 001
Action Name: Explanation Of Significant Differences
Action Completion date: 9/30/2004
Planned Complet. date: 9/30/2004
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Air Sparging

US INST CONTROL:

EPA ID: IND980679559
Site ID: 0501800

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

Name: MIDCO II
Action Name: ROD Amendment
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406
EPA Region: 05
County: LAKE
Event Code: Not reported
Inst. Control: Access Restriction
Actual Date: Not reported
Planned Complet. Date: Not reported
Complet. Date: 4/13/1992
Operable Unit: 01
Contaminated Media : Groundwater

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Action Name: ROD Amendment
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406
EPA Region: 05
County: LAKE
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: Not reported
Planned Complet. Date: Not reported
Complet. Date: 4/13/1992
Operable Unit: 01
Contaminated Media : Groundwater

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Action Name: ROD Amendment
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406
EPA Region: 05
County: LAKE
Event Code: Not reported
Inst. Control: Institutional Controls, (N.O.S.)
Actual Date: Not reported
Planned Complet. Date: Not reported
Complet. Date: 4/13/1992
Operable Unit: 01
Contaminated Media : Groundwater

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Action Name: ROD Amendment
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406
EPA Region: 05
County: LAKE
Event Code: Not reported
Inst. Control: Access Restriction
Actual Date: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

Planned Complet. Date: Not reported
Complet. Date: 4/13/1992
Operable Unit: 01
Contaminated Media : Sediment

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Action Name: ROD Amendment
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

EPA Region: 05
County: LAKE
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: Not reported
Planned Complet. Date: Not reported
Complet. Date: 4/13/1992
Operable Unit: 01
Contaminated Media : Sediment

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Action Name: ROD Amendment
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

EPA Region: 05
County: LAKE
Event Code: Not reported
Inst. Control: Institutional Controls, (N.O.S.)
Actual Date: Not reported
Planned Complet. Date: Not reported
Complet. Date: 4/13/1992
Operable Unit: 01
Contaminated Media : Sediment

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Action Name: ROD Amendment
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

EPA Region: 05
County: LAKE
Event Code: Not reported
Inst. Control: Access Restriction
Actual Date: Not reported
Planned Complet. Date: Not reported
Complet. Date: 4/13/1992
Operable Unit: 01
Contaminated Media : Soil

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Action Name: ROD Amendment

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MIDCO II (Continued)

1000825237

Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406
EPA Region: 05
County: LAKE
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: Not reported
Planned Complet. Date: Not reported
Complet. Date: 4/13/1992
Operable Unit: 01
Contaminated Media : Soil

EPA ID: IND980679559
Site ID: 0501800
Name: MIDCO II
Action Name: ROD Amendment
Address: 5900 INDUSTRIAL HIGHWAY
GARY, IN 46406

EPA Region: 05
County: LAKE
Event Code: Not reported
Inst. Control: Institutional Controls, (N.O.S.)
Actual Date: Not reported
Planned Complet. Date: Not reported
Complet. Date: 4/13/1992
Operable Unit: 01
Contaminated Media : Soil

9 **GO-TANE SERVICE STATIONS INC**
6415 INDUSTRIAL HIGHWAY
GARY, IN 46406

UST U003950931
N/A

< 1/8
1 ft.

Relative:
Higher

Actual:
590 ft.

UST:
Facility ID: 2125
Tank Number: 4
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 138
Company Name: Go-Tane Service Stations Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Unknown

Facility ID: 2125
Tank Number: 3
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 138
Company Name: Go-Tane Service Stations Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Unknown

Facility ID: 2125
Tank Number: 2

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

GO-TANE SERVICE STATIONS INC (Continued)

U003950931

Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 138
Company Name: Go-Tane Service Stations Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Unknown

Facility ID: 2125
Tank Number: 1
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 138
Company Name: Go-Tane Service Stations Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Unknown

10
NNW
< 1/8
261 ft.

LAKE CO BD OF COMMISSIONERS
1/4 MI E OF HWY US 12 & SR 312
GARY, IN 46406

RCRA-SQG 1001213873
FINDS INR000011346
IN MANIFEST

Relative:
Higher

RCRAInfo:
Owner: LAKE CO BD OF COMMISSIONERS
(219) 755-3000
EPA ID: INR000011346
Contact: WILLIAM HENDERSON
(219) 755-3000

Actual:
590 ft.

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated: 262.41
Area of Violation: GENERATOR-RECORDKEEPING REQUIREMENTS
Date Violation Determined: 05/01/2000
Actual Date Achieved Compliance: 08/07/2000

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 06/27/2000
Penalty Type: Not reported

Regulation Violated: 262.41
Area of Violation: GENERATOR-RECORDKEEPING REQUIREMENTS
Date Violation Determined: 06/01/1998
Actual Date Achieved Compliance: 09/01/1998

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 06/29/1998
Penalty Type: Not reported

Regulation Violated: Not reported
Area of Violation: GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined: 12/29/1997
Actual Date Achieved Compliance: Not reported

Regulation Violated: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

LAKE CO BD OF COMMISSIONERS (Continued)

EDR ID Number
EPA ID Number

Database(s)

1001213873

Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	12/29/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-GENERAL STANDARDS
Date Violation Determined:	12/29/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	12/29/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	12/29/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	12/29/1997
Actual Date Achieved Compliance:	Not reported

There are 8 violation record(s) reported at this site:

<u>Evaluation</u>	<u>Area of Violation</u>
Non-Financial Record Review	GENERATOR-RECORDKEEPING REQUIREMENTS
Non-Financial Record Review	GENERATOR-RECORDKEEPING REQUIREMENTS
Compliance Evaluation Inspection	GENERATOR-PRE-TRANSPORT REQUIREMENTS
	GENERATOR-PRE-TRANSPORT REQUIREMENTS
	TSD-GENERAL STANDARDS
	GENERATOR-PRE-TRANSPORT REQUIREMENTS
	GENERATOR-PRE-TRANSPORT REQUIREMENTS
	GENERATOR-PRE-TRANSPORT REQUIREMENTS

Date of
Compliance
20000807
19980901

FINDS:

Other Pertinent Environmental Activity Identified at Site

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (I-DEM) has implemented the Indiana-Facility Registry System (I-FRS). The I-FRS provides the interface and processes to link facility data monitored by multiple State and EPA program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node

IN MANIFEST:

EPA ID: INR000011346

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

LAKE CO BD OF COMMISSIONERS (Continued)

1001213873

Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: INR000011346
Generator Type: 0
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 2293 N MAIN ST
Handler Mailing City: CROWN POINT
Handler Mailing State: IN
Handler Mailing Zip: 46307
Contact Last Name: HENDERSON
Contact First Name: WILLIAM
Contact Telephone: 219-755-3000
Contact Type: A

EPA ID #: INR000011346
Generator Type: Not reported
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 2293 N MAIN ST
Handler Mailing City: CROWN POINT
Handler Mailing State: IN
Handler Mailing Zip: 46307
Contact Last Name: HENDERSON
Contact First Name: WILLIAM
Contact Telephone: 219-755-3000
Contact Type: A

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

LAKE CO BD OF COMMISSIONERS (Continued)

1001213873

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Transporters Used: Not reported

EPA ID: INR000011346
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: INR000011346
Generator Type: 0
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 2293 N MAIN ST
Handler Mailing City: CROWN POINT
Handler Mailing State: IN
Handler Mailing Zip: 46307
Contact Last Name: HENDERSON
Contact First Name: WILLIAM
Contact Telephone: 219-755-3000
Contact Type: A

EPA ID #: INR000011346
Generator Type: Not reported
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 2293 N MAIN ST
Handler Mailing City: CROWN POINT
Handler Mailing State: IN
Handler Mailing Zip: 46307
Contact Last Name: HENDERSON
Contact First Name: WILLIAM
Contact Telephone: 219-755-3000
Contact Type: A

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

Map ID
Direction
Distance
Distance (ft.)
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

LAKE CO BD OF COMMISSIONERS (Continued)

1001213873

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Tranporters Used: Not reported

B11
NNW
< 1/8
488 ft.

OSI ENVIRONMENTAL INC
6980 CHICAGO AVE
GARY, IN 46406

RCRA-SQG 1000510335
FINDS IND984899740
IN MANIFEST
TIER 2

Site 1 of 2 in cluster B

Relative:
Higher

Actual:
590 ft.

RCRAInfo:
Owner: OSI ENVIRONMENTAL INC
(219) 944-1230
EPA ID: IND984899740
Contact: Not reported
Classification: Small Quantity Generator
TSD Activities: Not reported
Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (I-DEM) has implemented the Indiana-Facility Registry System (I-FRS). The I-FRS provides the interface and processes to link facility data monitored by multiple State and EPA program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

OSI ENVIRONMENTAL INC (Continued)

1000510335

IN MANIFEST:

EPA ID: IND984899740
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND984899740
Generator Type: 0
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 3300 E 83RD PL
Handler Mailing City: MERRILLVILLE
Handler Mailing State: IN
Handler Mailing Zip: 46410
Contact Last Name: NAVARRO
Contact First Name: RON
Contact Telephone: 219-944-1230
Contact Type: A

EPA ID #: IND984899740
Generator Type: Not reported
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 3300 E 83RD PL
Handler Mailing City: MERRILLVILLE
Handler Mailing State: IN
Handler Mailing Zip: 46410
Contact Last Name: NAVARRO
Contact First Name: RON
Contact Telephone: 219-944-1230
Contact Type: A

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

OSI ENVIRONMENTAL INC (Continued)

1000510335

TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Transporters Used: Not reported

EPA ID: IND984899740
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND984899740
Generator Type: 0
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 3300 E 83RD PL
Handler Mailing City: MERRILLVILLE
Handler Mailing State: IN
Handler Mailing Zip: 46410
Contact Last Name: NAVARRO
Contact First Name: RON
Contact Telephone: 219-944-1230
Contact Type: A

EPA ID #: IND984899740
Generator Type: Not reported
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 3300 E 83RD PL
Handler Mailing City: MERRILLVILLE
Handler Mailing State: IN
Handler Mailing Zip: 46410
Contact Last Name: NAVARRO
Contact First Name: RON
Contact Telephone: 219-944-1230
Contact Type: A

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

OSI ENVIRONMENTAL INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000510335

MANIFEST SHIPPER:

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Transporters Used: Not reported

IN TIER 2:

Facility ID: 24624
Chemical Name: Fuel Oil no. 2-D
CAS Number: 68476346
Max Daily Amount: 04
Storage Location: bulk tank inside a containment dike
Owner Name: OSI Environmental Inc.
Owner Phone: 2199424886
Contact Name: Ron Navarro
Contact Phone: 2199424886
SIC Code: 5099

Facility ID: 24624
Chemical Name: Other Chemical 2
CAS Number: 999002
Max Daily Amount: 04
Storage Location: bulk tank inside a containment dike
Storage Location: mixture of diesel fuel & gasoline
Owner Name: OSI Environmental Inc.
Owner Phone: 2199424886
Contact Name: Ron Navarro
Contact Phone: 2199424886
SIC Code: 5099

Facility ID: 24624
Chemical Name: Other Chemical 43
CAS Number: 999043
Max Daily Amount: 05
Storage Location: bulk tank inside a containment dike
Storage Location: used oils
Owner Name: OSI Environmental Inc.
Owner Phone: 2199424886
Contact Name: Ron Navarro
Contact Phone: 2199424886
SIC Code: 5099

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

B12 **P. I. & I MOTOR EXPRESS**
NNW **7000 CHICAGO AVENUE**
< 1/8 **GARY, IN 46406**
514 ft.

LUST **1000755123**
UST **N/A**
TIER 2

Site 2 of 2 in cluster B

Relative:
Higher

LUST:

Actual:
590 ft.

Incident Number: 16032
Facility ID: 199807530
Priority: Medium
Affected Area: Soil
Description: Active

Incident Number: 16032
Facility ID: 199807530
Priority: Medium
Affected Area: Groundwater
Description: Active

UST:

Facility ID: 16032
Tank Number: 1
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 13799
Company Name: P I & I Motor Express Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Diesel

Facility ID: 16032
Tank Number: 2
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 13799
Company Name: P I & I Motor Express Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Other

Facility ID: 16032
Tank Number: 3
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 13799
Company Name: P I & I Motor Express Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Gasoline

IN TIER 2:

Facility ID: 9404
Chemical Name: Fuel Oil no. 2-D
CAS Number: 68476346
Max Daily Amount: 04

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

P. I. & I MOTOR EXPRESS (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000755123

Storage Location: 7000 Chicago Ave in above ground storage tank
Owner Name: P I & I Motor Express
Owner Phone: 3304484035
Contact Name: Bob Micco
Contact Phone: 2199440930
SIC Code: 4213

13
NNW
< 1/8
561 ft.

LURIA BROTHERS & COMPANY INCORPORATED
6633 WEST INDUSTRIAL HIGHWAY
GARY, IN 46406

RCRA-SQG
FINDS
CORRACTS
CERC-NFRAP
IN MANIFEST

1000245218
IND095264818

Relative:
Higher

Actual:
590 ft.

RCRAInfo Corrective Action Summary:

Event: CA Prioritization, Facility or area was assigned a medium corrective action priority.
Event Date: 06/30/1993

RCRAInfo:

Owner: NAME NOT REPORTED
(312) 555-1212
EPA ID: IND095264818
Contact: MATTHEW HERMANN
(216) 752-4000

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated:	Not reported
Area of Violation:	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
Date Violation Determined:	09/29/1987
Actual Date Achieved Compliance:	02/22/1990
Regulation Violated:	Not reported
Area of Violation:	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
Date Violation Determined:	09/29/1987
Actual Date Achieved Compliance:	02/22/1990

There are 2 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Financial Record Review	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	19900222
Compliance Evaluation Inspection	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19900222
Financial Record Review	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	19900222

FINDS:

Other Pertinent Environmental Activity Identified at Site

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (I-DEM) has implemented the Indiana-Facility

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

LURIA BROTHERS & COMPANY INCORPORATED (Continued)

1000245218

Registry System (I-FRS). The I-FRS provides the interface and processes to link facility data monitored by multiple State and EPA program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node

CORRACTS:

EPA ID: IND095264818
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 06/30/1993
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): Not reported

CERC-NFRAP:

Site ID: 0501564
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: LURIA BROS & CO INC
Alias Address: 6633 W INDUSTRIAL HIGHWAY
GARY, IN 46406
Site Description: Not reported

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY
Date Started: Not reported
Date Completed: 04/29/1986
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 06/19/1987
Priority Level: NFRAP (No Futher Remedial Action Planned)

Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 07/31/1987
Priority Level: NFRAP (No Futher Remedial Action Planned)

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 10/24/1991
Priority Level: Not reported

IN MANIFEST:

EPA ID: IND095264818
Flag: HANDLER

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

LURIA BROTHERS & COMPANY INCORPORATED (Continued)

EDR ID Number
EPA ID Number

Database(s)

Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND095264818

Generator Type: 0

Generator Status: Non Active

Transporter Type: Not reported

Transporter Status: Non Active

TSD Type: Interim or Enforcement TSD

TSD Status: Non Active

Handler Mailing Address: PO BOX 6548

Handler Mailing City: CLEVELAND

Handler Mailing State: OH

Handler Mailing Zip: 44101

Contact Last Name: HAROLD

Contact First Name: DEREK

Contact Telephone: 216-752-4000

Contact Type: B

EPA ID #: IND095264818

Generator Type: Not reported

Generator Status: Non Active

Transporter Type: Not reported

Transporter Status: Non Active

TSD Type: Interim or Enforcement TSD

TSD Status: Non Active

Handler Mailing Address: PO BOX 6548

Handler Mailing City: CLEVELAND

Handler Mailing State: OH

Handler Mailing Zip: 44101

Contact Last Name: HAROLD

Contact First Name: DEREK

Contact Telephone: 216-752-4000

Contact Type: B

MANIFEST REC:

Report Year: Not reported

EPA ID: Not reported

Page Number: Not reported

Sub Page: Not reported

Generator EPA ID: Not reported

Waste Description: Not reported

Quantity of Waste: Not reported

Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: Not reported

Waste Description Shipped: Not reported

Shipped File Page Number: Not reported

Number Of TSD Facilities: Not reported

Waste Codes on Page Number: Not reported

Waste Code: Not reported

Tons Of Waste Shipped Year: Not reported

TSD Facility EPA ID: Not reported

Facility Address 2: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

LURIA BROTHERS & COMPANY INCORPORATED (Continued)

1000245218

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Transporters Used: Not reported

EPA ID: IND095264818
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND095264818
Generator Type: 0
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 6548
Handler Mailing City: CLEVELAND
Handler Mailing State: OH
Handler Mailing Zip: 44101
Contact Last Name: HAROLD
Contact First Name: DEREK
Contact Telephone: 216-752-4000
Contact Type: B

EPA ID #: IND095264818
Generator Type: Not reported
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 6548
Handler Mailing City: CLEVELAND
Handler Mailing State: OH
Handler Mailing Zip: 44101
Contact Last Name: HAROLD
Contact First Name: DEREK
Contact Telephone: 216-752-4000
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

LURIA BROTHERS & COMPANY INCORPORATED (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000245218

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Tranporters Used: Not reported

C14
WNW
1/8-1/4
906 ft.

RIECHMANN ENTERPRISES INC
7200 CHICAGO AVE
GARY, IN 46406

LUST 1000756332
UST N/A

Site 1 of 3 in cluster C

Relative:
Higher

Actual:
590 ft.

LUST:

Incident Number: 8151
Facility ID: 199501549
Priority: Medium
Affected Area: Groundwater
Description: Active

Incident Number: 8151
Facility ID: 199501549
Priority: Medium
Affected Area: Soil
Description: Active

UST:

Facility ID: 8151
Tank Number: 2
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 210
Company Name: Riechmann Enterprises Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Diesel

Facility ID: 8151
Tank Number: 1
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 210
Company Name: Riechmann Enterprises Inc
Mailing Address: Not reported
Mailing Address 2: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RIECHMANN ENTERPRISES INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000756332

Mailing City,St,Zip: Not reported
Substance Desc: Diesel

C15
WNW
1/8-1/4
936 ft.

P G T TRUCKING INC
7212 CHICAGO
GARY, IN 46404

UST U003209045
N/A

Site 2 of 3 in cluster C

Relative:
Lower

Actual:
589 ft.

UST:

Facility ID: 7935
Tank Number: 4
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 297
Company Name: P G T Trucking
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Used Oil

Facility ID: 7935
Tank Number: 3
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 297
Company Name: P G T Trucking
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Other

Facility ID: 7935
Tank Number: 2
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 297
Company Name: P G T Trucking
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Diesel

Facility ID: 7935
Tank Number: 1
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 297
Company Name: P G T Trucking
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Diesel

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

C16 P G T TRUCKING INC
WNW 7212 CHICAGO
1/8-1/4 GARY, IN 46404
936 ft.

LUST U001079769
N/A

Site 3 of 3 in cluster C

Relative:
Lower

LUST:

Actual:
589 ft.

Incident Number: 7935
Facility ID: 199205513
Priority: Medium
Affected Area: Groundwater
Description: Active

Incident Number: 7935
Facility ID: 199205513
Priority: Medium
Affected Area: Soil
Description: Active

17 INDIANA CEDNTRAL ENGINE & EQUIP
WNW 7330 W CHICAGO AVE
1/8-1/4 GARY, IN 46406
1241 ft.

UST U000185606
N/A

Relative:
Lower

UST:

Actual:
589 ft.

Facility ID: 4122
Tank Number: 1
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 4195
Company Name: Indiana Central Engine & Equip
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Used Oil

18 ROLAND DUMP-SITE #73
ENE EAST OF INDUSTRIAL HWY
1/4-1/2 GARY, IN 46406
1442 ft.

CERC-NFRAP 1003870606
IND980500557

Relative:
Higher

CERC-NFRAP:

Actual:
595 ft.

Site ID: 0501614
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: SITE #73
Alias Address: Not reported
IN

Site Description: Not reported

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY
Date Started: Not reported
Date Completed: 06/01/1980
Priority Level: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

ROLAND DUMP-SITE #73 (Continued)

EDR ID Number
EPA ID Number

Database(s)

1003870606

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 01/01/1984
Priority Level: High

Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 09/19/1985
Priority Level: NFRAP (No Further Remedial Action Planned)

Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: Not reported
Date Completed: 05/11/1986
Priority Level: NFRAP (No Further Remedial Action Planned)

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 12/02/1991
Priority Level: Not reported

19
NNW
1/4-1/2
1494 ft.

FORMER RECOVER, INC.
6917 INDUSTRIAL HWY
GARY, IN 46406

BROWNFIELDS S108256901
N/A

Relative:
Higher

IN BROWNFIELD:
Facility ID: 4060049
Project Manager: khendrix

Actual:
590 ft.

D20
SE
1/4-1/2
1734 ft.

CORRECT CONSTRUCTION INC
6012 W INDUSTRIAL HWY
GARY, IN 46406

LUST U003093387
UST N/A

Relative:
Higher

Site 1 of 3 in cluster D

LUST:
Incident Number: 3603
Facility ID: 199207530
Priority: Low
Affected Area: Soil
Description: NFA-UST Branch Guidance Manual

Actual:
590 ft.

UST:

Facility ID: 3603
Tank Number: 1
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 3932
Company Name: Correct Construction Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Gasoline

Facility ID: 3603
Tank Number: 4

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CORRECT CONSTRUCTION INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003093387

Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 3932
Company Name: Correct Construction Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Gasoline

Facility ID: 3603
Tank Number: 5
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 3932
Company Name: Correct Construction Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Gasoline

Facility ID: 3603
Tank Number: 3
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 3932
Company Name: Correct Construction Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Gasoline

Facility ID: 3603
Tank Number: 2
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 3932
Company Name: Correct Construction Inc
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Gasoline

D21
SE
1/4-1/2
1742 ft.

CALUMET INDUSTRIES
6010 WEST INDUSTRIAL HIGHWAY
GARY, IN 46406

Site 2 of 3 in cluster D

Relative:
Higher

Actual:
590 ft.

RCRA-SQG 1000463880
FINDS IND014387880
CERC-NFRAP
IN MANIFEST

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CALUMET INDUSTRIES (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000463880

RCRAInfo:
Owner: GRAEGIN INDUSTRIES
(312) 555-1212
EPA ID: IND014387880
Contact: JOHN HOELZLHAMMER
(219) 949-9881
Classification: Small Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (I-DEM) has implemented the Indiana-Facility Registry System (I-FRS). The I-FRS provides the interface and processes to link facility data monitored by multiple State and EPA program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node

CERC-NFRAP:
Site ID: 0501366
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Alias Name(s):
Alias Name: CALUMET IND
Alias Address: 6010 W INDUSTRIAL HWY
GARY, IN 46406
Site Description: Not reported

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 10/01/1980
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 06/23/1986
Priority Level: Low

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CALUMET INDUSTRIES (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000463880

Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 12/04/1989
Priority Level: NFRAP (No Further Remedial Action Planned)

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 12/12/1996
Priority Level: Not reported

IN MANIFEST:

EPA ID: IND014387880
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND014387880
Generator Type: 0
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6010 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: BRATSAKIS
Contact First Name: JOHN J
Contact Telephone: 219-949-9881
Contact Type: B

EPA ID #: IND014387880
Generator Type: Not reported
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6010 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: BRATSAKIS
Contact First Name: JOHN J
Contact Telephone: 219-949-9881
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

CALUMET INDUSTRIES (Continued)

1000463880

MANIFEST SHIPPER:

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Transporters Used: Not reported

EPA ID: IND014387880
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND014387880
Generator Type: 0
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6010 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: BRATSAKIS
Contact First Name: JOHN J
Contact Telephone: 219-949-9881
Contact Type: B

EPA ID #: IND014387880
Generator Type: Not reported
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6010 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: BRATSAKIS
Contact First Name: JOHN J
Contact Telephone: 219-949-9881
Contact Type: B

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CALUMET INDUSTRIES (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000463880

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Transporters Used: Not reported

D22
SE
1/4-1/2
1798 ft.

Relative:
Higher

Actual:
590 ft.

GARY REGIONAL AIRPORT
6001 W INDUSTRIAL HWY
GARY, IN 46406

Site 3 of 3 in cluster D

RCRAInfo:

Owner: GARY REGIONAL AIRPORT AUTHORITY
(219) 949-9722
EPA ID: INR000005199
Contact: LAVELL GATEWOOD
(219) 949-9722

Classification: TSD
TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated: 279.22c
Area of Violation: INUOA
Date Violation Determined: 05/14/2003
Actual Date Achieved Compliance: 05/14/2003
Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 05/14/2003
Penalty Type: Not reported
Regulation Violated: 262.41

RCRA-SQG 1001087483
FINDS INR000005199
IN Spills
RCRA-TSDF
CERC-NFRAP
IN MANIFEST

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

GARY REGIONAL AIRPORT (Continued)

EDR ID Number
EPA ID Number

Database(s)

1001087483

Area of Violation:	GENERATOR-RECORDKEEPING REQUIREMENTS
Date Violation Determined:	06/01/1998
Actual Date Achieved Compliance:	09/01/1998
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	07/06/1998
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS
Date Violation Determined:	11/04/1996
Actual Date Achieved Compliance:	Not reported
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	07/14/1997
Penalty Type:	Final Monetary Penalty
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	02/25/1998
Penalty Type:	Final Monetary Penalty
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS
Date Violation Determined:	11/04/1996
Actual Date Achieved Compliance:	Not reported
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	07/14/1997
Penalty Type:	Final Monetary Penalty
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	02/25/1998
Penalty Type:	Final Monetary Penalty
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-OTHER REQUIREMENTS
Date Violation Determined:	11/04/1996
Actual Date Achieved Compliance:	Not reported
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	07/14/1997
Penalty Type:	Final Monetary Penalty
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	02/25/1998
Penalty Type:	Final Monetary Penalty
Regulation Violated:	Not reported
Area of Violation:	TSD-GENERAL STANDARDS
Date Violation Determined:	11/04/1996
Actual Date Achieved Compliance:	Not reported
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	07/14/1997
Penalty Type:	Final Monetary Penalty
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	02/25/1998
Penalty Type:	Final Monetary Penalty
Regulation Violated:	Not reported
Area of Violation:	TSD-CONTINGENCY PLAN REQUIREMENTS
Date Violation Determined:	11/04/1996
Actual Date Achieved Compliance:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

GARY REGIONAL AIRPORT (Continued)

EDR ID Number
EPA ID Number

Database(s)

1001087483

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/14/1997
Penalty Type: Final Monetary Penalty
Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 02/25/1998
Penalty Type: Final Monetary Penalty

Penalty Summary:

Penalty Description	Penalty Date	Penalty Amount	Lead Agency
Final Monetary Penalty	2/25/1998	20150	STATE

There are 7 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection	INUOA	20030514
Non-Financial Record Review	GENERATOR-RECORDKEEPING REQUIREMENTS	19980901
Non-Financial Record Review	TSD-GENERAL STANDARDS	
	TSD-OTHER REQUIREMENTS	
	TSD-CONTINGENCY PLAN REQUIREMENTS	
	GENERATOR-OTHER REQUIREMENTS	
Non-Financial Record Review	TSD-OTHER REQUIREMENTS	
	TSD-GENERAL STANDARDS	
	TSD-OTHER REQUIREMENTS	
	TSD-CONTINGENCY PLAN REQUIREMENTS	
	GENERATOR-OTHER REQUIREMENTS	
Compliance Evaluation Inspection	TSD-OTHER REQUIREMENTS	
	TSD-GENERAL STANDARDS	
	TSD-OTHER REQUIREMENTS	
	TSD-CONTINGENCY PLAN REQUIREMENTS	
	GENERATOR-OTHER REQUIREMENTS	
	TSD-OTHER REQUIREMENTS	

FINDS:

Other Pertinent Environmental Activity Identified at Site

PCS (Permit Compliance System) is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (I-DEM) has implemented the Indiana-Facility Registry System (I-FRS). The I-FRS provides the interface and

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

GARY REGIONAL AIRPORT (Continued)

1001087483

processes to link facility data monitored by multiple State and EPA program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node

SPILL:

Facility ID: 199511008
Incident Date: 11/01/95
Report Date: 11/01/95
Material: Aviation Fuel
Spill Source: Commercial
Recovered Amount: 0
Recovered Units: Unknown Units
Spilled Amount: 1100
Spilled Units: Gallons
Contained: N
Water Affected: None
Spill Type: Spill
Area Affected: Undetermined
Fish Killed: 0
Public Intake: Not reported

CERC-NFRAP:

Site ID: 0501484
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: INDUSTRIAL HIGHWAY OIL SPILL
Alias Address: 6131 INDUSTRIAL HIGHWAY
GARY, IN
Alias Name: INDUSTRIAL HWY OIL RELEASE
Alias Address: 6131 W INDUSTRIAL HWY
GARY, IN 46406
Alias Name: GARY MUNI AIRPORT
Alias Address: 6131 W INDUSTRIAL HWY
GARY, IN 46406

Site Description: Not reported

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY
Date Started: Not reported
Date Completed: 08/01/1980
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 06/17/1987
Priority Level: NFRAP (No Further Remedial Action Planned)

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

GARY REGIONAL AIRPORT (Continued)

EDR ID Number
EPA ID Number

Database(s)

1001087483

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 12/03/1987
Priority Level: High

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 12/30/1991
Priority Level: Not reported

IN MANIFEST:

EPA ID: INR000005199
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: INR000005199
Generator Type: 0
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6001 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: GATEWOOD
Contact First Name: LAVELL
Contact Telephone: 219-949-9722
Contact Type: B

EPA ID #: INR000005199
Generator Type: Not reported
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6001 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: GATEWOOD
Contact First Name: LAVELL
Contact Telephone: 219-949-9722
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

GARY REGIONAL AIRPORT (Continued)

1001087483

MANIFEST SHIPPER:

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Transporters Used: Not reported

EPA ID: INR000005199
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: INR000005199
Generator Type: 0
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6001 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: GATEWOOD
Contact First Name: LAVELL
Contact Telephone: 219-949-9722
Contact Type: B

EPA ID #: INR000005199
Generator Type: Not reported
Generator Status: Non Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: 6001 W INDUSTRIAL HWY
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: GATEWOOD
Contact First Name: LAVELL
Contact Telephone: 219-949-9722
Contact Type: B

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

GARY REGIONAL AIRPORT (Continued)

1001087483

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Transporters Used: Not reported

23
WNW
1/4-1/2
2056 ft.

WESTERN SCRAP CORP
6901 W CHICAGO
GARY, IN 46406

FINDS 1000402405
CERC-NFRAP IND095258075

Relative:
Higher

FINDS:
Other Pertinent Environmental Activity Identified at Site

Actual:
590 ft.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and its Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (I-DEM) has implemented the Indiana-Facility Registry System (I-FRS). The I-FRS provides the interface and processes to link facility data monitored by multiple State and EPA

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

WESTERN SCRAP CORP (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000402405

program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node

CERC-NFRAP:

Site ID: 0501563
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Referred to Removal - NFRAP

CERCLIS-NFRAP Site Contact Name(s):

Contact Name: WILLIAM SIMES
Contact Tel: (312) 886-3337
Contact Title: On-Scene Coordinator (OSC)

Contact Name: LEONARD ZINTAK
Contact Tel: (312) 886-4246
Contact Title: On-Scene Coordinator (OSC)

Site Description: Not reported

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY
Date Started: Not reported
Date Completed: 08/12/1985
Priority Level: Not reported

Action: NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started: Not reported
Date Completed: 05/15/1986
Priority Level: Not reported

Action: UNILATERAL ADMIN ORDER
Date Started: Not reported
Date Completed: 06/17/1986
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 06/30/1987
Priority Level: Low

Action: UNILATERAL ADMIN ORDER
Date Started: Not reported
Date Completed: 11/16/1987
Priority Level: Not reported

Action: REMOVAL
Date Started: 07/09/1986
Date Completed: 03/16/1989
Priority Level: Cleaned up

Action: PRELIMINARY ASSESSMENT

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

WESTERN SCRAP CORP (Continued)

1000402405

Date Started: Not reported
Date Completed: 12/21/1990
Priority Level: NFRAP (No Further Remedial Action Planned)

Action: SECTION 107 LITIGATION
Date Started: 06/29/1990
Date Completed: 12/19/1992
Priority Level: Not reported

Action: UNILATERAL ADMIN ORDER
Date Started: Not reported
Date Completed: 03/29/1999
Priority Level: Not reported

Action: ADMINISTRATIVE RECORDS
Date Started: 03/07/1990
Date Completed: 05/31/2005
Priority Level: Admin Record Compiled for a Removal Event

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 05/31/2005
Priority Level: Not reported

E24 REFAX, INC. PROPERTY (ADZ)
SE 5934-6122 INDUSTRIAL HIGHWAY
1/4-1/2 GARY, IN 46402
2173 ft.

BROWNFIELDS S105588730
N/A

Relative: Site 1 of 2 in cluster E
Higher IN BROWNFIELD:
Facility ID: 4990068
Actual: Project Manager: khendrix
590 ft.

E25 AVENUE TOWING PROPERTY
SE 5930 INDUSTRIAL HIGHWAY
1/4-1/2 GARY, IN 46402
2195 ft.

BROWNFIELDS S105588719
N/A

Relative: Site 2 of 2 in cluster E
Higher IN BROWNFIELD:
Facility ID: 4990049
Actual: Project Manager: kcoad
590 ft.

26 CITCO PETROLEUM COMPANY
West 2500 EAST CHICAGO AVENUE
1/2-1 EAST CHICAGO, IN 46312
3298 ft.

FINDS 1000236063
IND095267381
IN Spills
RCRA-LQG
UST
CORRACTS
CERC-NFRAP
IN MANIFEST
TIER 2

Relative: Higher
Actual: 590 ft.
FINDS:
Other Pertinent Environmental Activity Identified at Site

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

CITCO PETROLEUM COMPANY (Continued)

1000236063

PCS (Permit Compliance System) is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

FRP

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and its Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (I-DEM) has implemented the Indiana-Facility Registry System (I-FRS). The I-FRS provides the interface and processes to link facility data monitored by multiple State and EPA program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITGO PETROLEUM COMPANY (Continued)

Database(s)

EDR ID Number
EPA ID Number

1000236063

SPILL:

Facility ID: 199110001
Incident Date: 09/30/91
Report Date: 10/01/91
Material: # 2 Fuel Oil
Spill Source: Commercial
Recovered Amount: 200
Recovered Units: Gallons
Spilled Amount: 200
Spilled Units: Gallons
Contained: Y
Water Affected: None
Spill Type: Spill
Area Affected: 300 Ft Sq
Fish Killed: 0
Public Intake: Not reported

RCRAInfo Corrective Action Summary:

Event: CA Prioritization, Facility or area was assigned a low corrective action priority.
Event Date: 03/31/1992

RCRAInfo:

Owner: CITGO PETROLEUM CORP
(312) 555-1212
EPA ID: IND095267381
Contact: B REEDER
(219) 398-0734

Classification: Large Quantity Generator
TSDF Activities: Not reported

BIENNIAL REPORTS:

Last Biennial Reporting Year: 2005

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	8458.00	D004	5200.00
D007	5200.00	D008	5200.00
D018	8458.00		

Violation Status: Violations exist

Regulation Violated: 264.195
Area of Violation: TSD-TANKS REQUIREMENTS
Date Violation Determined: 09/18/2003
Actual Date Achieved Compliance: 07/22/2005

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 12/31/2003
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: PROPOSED AGREED ORDER SENT (IN)

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

CITCO PETROLEUM COMPANY (Continued)

1000236063

Enforcement Action Date: 09/17/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 11/17/2004
Penalty Type: Final Monetary Penalty

Regulation Violated: 262.34/265.16
Area of Violation: GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined: 09/18/2003
Actual Date Achieved Compliance: 07/22/2005

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 12/31/2003
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: PROPOSED AGREED ORDER SENT (IN)
Enforcement Action Date: 09/17/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 11/17/2004
Penalty Type: Final Monetary Penalty

Regulation Violated: 262.34d5i
Area of Violation: GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined: 09/18/2003
Actual Date Achieved Compliance: 07/22/2005

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 12/31/2003
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: PROPOSED AGREED ORDER SENT (IN)
Enforcement Action Date: 09/17/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 11/17/2004
Penalty Type: Final Monetary Penalty

Regulation Violated: 265.16
Area of Violation: TSD-OTHER REQUIREMENTS
Date Violation Determined: 09/18/2003
Actual Date Achieved Compliance: 07/22/2005

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 12/31/2003
Penalty Type: Final Monetary Penalty

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CITCO PETROLEUM COMPANY (Continued)

1000236063

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: PROPOSED AGREED ORDER SENT (IN)
Enforcement Action Date: 09/17/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 11/17/2004
Penalty Type: Final Monetary Penalty

Regulation Violated: 264.193
Area of Violation: TSD-TANKS REQUIREMENTS
Date Violation Determined: 09/18/2003
Actual Date Achieved Compliance: 07/22/2005

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 12/31/2003
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: PROPOSED AGREED ORDER SENT (IN)
Enforcement Action Date: 09/17/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 11/17/2004
Penalty Type: Final Monetary Penalty

Regulation Violated: 279.22c
Area of Violation: INUOA
Date Violation Determined: 09/18/2003
Actual Date Achieved Compliance: 07/22/2005

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 12/31/2003
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: PROPOSED AGREED ORDER SENT (IN)
Enforcement Action Date: 09/17/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 11/17/2004
Penalty Type: Final Monetary Penalty

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000236063

Regulation Violated: 262.34/265.192
Area of Violation: GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined: 09/18/2003
Actual Date Achieved Compliance: 07/22/2005

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 12/31/2003
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 07/13/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: PROPOSED AGREED ORDER SENT (IN)
Enforcement Action Date: 09/17/2004
Penalty Type: Final Monetary Penalty

Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 11/17/2004
Penalty Type: Final Monetary Penalty

Regulation Violated: Not reported
Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 07/25/1984
Actual Date Achieved Compliance: 10/15/1986

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 06/11/1985
Penalty Type: Not reported

There are 8 violation record(s) reported at this site:

<u>Evaluation</u>	<u>Area of Violation</u>	<u>Date of Compliance</u>
Compliance Evaluation Inspection	GENERATOR-PRE-TRANSPORT REQUIREMENTS	20050722
	GENERATOR-PRE-TRANSPORT REQUIREMENTS	20050722
	GENERATOR-PRE-TRANSPORT REQUIREMENTS	20050722
	INUOA	20050722
	TSD-TANKS REQUIREMENTS	20050722
	TSD-OTHER REQUIREMENTS	20050722
	TSD-TANKS REQUIREMENTS	20050722
Non-Financial Record Review	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19861015

UST:

Facility ID: 3373
Tank Number: 4
Install Date: / /
Tank Status: Permanently Out of Service
Owner Id: 3879
Company Name: Citgo Petroleum Corporation
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Gasoline

Facility ID: 3373
Tank Number: 2
Install Date: / /

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000236063

Tank Status: Permanently Out of Service
Owner Id: 3879
Company Name: Citgo Petroleum Corporation
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Gasoline

Facility ID: 3373
Tank Number: 1
Install Date: / /

Tank Status: Permanently Out of Service
Owner Id: 3879
Company Name: Citgo Petroleum Corporation
Mailing Address: Not reported
Mailing Address 2: Not reported
Mailing City,St,Zip: Not reported
Substance Desc: Gasoline

CORRACTS:

EPA ID: IND095267381
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/31/1992
Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
NAICS Code(s): 42471
Petroleum Bulk Stations and Terminals

CERC-NFRAP:

Site ID: 0501565
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Deferred to RCRA

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: CITCO PETROLEUM CO
Alias Address: 2500 EAST CHICAGO AVENUE
EAST CHICAGO, IN 46312

Site Description: Not reported

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY
Date Started: Not reported
Date Completed: 08/01/1980
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 09/01/1984
Priority Level: High

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 12/11/1991

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000236063

Priority Level: Deferred to RCRA (Subtitle C)

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 12/11/1995
Priority Level: Not reported

IN MANIFEST:

EPA ID: IND095267381
Flag: SHIP
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND095267381
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 178
Handler Mailing City: EAST CHICAGO
Handler Mailing State: IN
Handler Mailing Zip: 46312
Contact Last Name: BUCKNER
Contact First Name: SCOTT B
Contact Telephone: 847-439-3589
Contact Type: A

EPA ID #: IND095267381
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 178
Handler Mailing City: EAST CHICAGO
Handler Mailing State: IN
Handler Mailing Zip: 46312
Contact Last Name: BUCKNER
Contact First Name: SCOTT B
Contact Telephone: 847-439-3589
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000236063

EPA ID:	IND095267381
Waste Description Shipped:	WASTE FLAMMABLE LIQUID, GASOLINE SLUDGE FROM CLEANING PETROLEUM STORAGE TANKS
Shipped File Page Number:	1
Number Of TSD Facilities:	1
Waste Codes on Page Number:	1
Waste Code:	D001
Tons Of Waste Shipped Year:	4
TSD Facility EPA ID:	IND000646943
Facility Address 2:	Not reported
EPA ID:	IND095267381
Waste Description Shipped:	WASTE FLAMMABLE LIQUID, GASOLINE SLUDGE FROM CLEANING PETROLEUM STORAGE TANKS
Shipped File Page Number:	1
Number Of TSD Facilities:	1
Waste Codes on Page Number:	2
Waste Code:	D018
Tons Of Waste Shipped Year:	4
TSD Facility EPA ID:	IND000646943
Facility Address 2:	Not reported
EPA ID:	IND095267381
Waste Description Shipped:	HAZ WASTE SOLID, REMOVAL/REPLACEMENT OF TANK SEALS/WIPERS FROM PETROLEUM STORAGE TANKS
Shipped File Page Number:	2
Number Of TSD Facilities:	1
Waste Codes on Page Number:	1
Waste Code:	D001
Tons Of Waste Shipped Year:	1
TSD Facility EPA ID:	IND000646943
Facility Address 2:	Not reported
EPA ID:	IND095267381
Waste Description Shipped:	HAZ WASTE SOLID, REMOVAL/REPLACEMENT OF TANK SEALS/WIPERS FROM PETROLEUM STORAGE TANKS
Shipped File Page Number:	2
Number Of TSD Facilities:	1
Waste Codes on Page Number:	2
Waste Code:	D018
Tons Of Waste Shipped Year:	1
TSD Facility EPA ID:	IND000646943
Facility Address 2:	Not reported
EPA ID:	IND095267381
Waste Description Shipped:	MISCELLANEOUS MATERIALS (RAGS,SORBENT PADS, OIL DRI,ETC.) USED TO CLEANUP AFTER MAINTENANCE ACTIVITIES AND NON-MAINTENANCE ACTIVITIES
Shipped File Page Number:	1
Number Of TSD Facilities:	1
Waste Codes on Page Number:	1
Waste Code:	D001
Tons Of Waste Shipped Year:	0.229
TSD Facility EPA ID:	IND000646943
Facility Address 2:	Not reported
IN MANIFEST SHIPPER:	Has 5 more record(s) for this section. Please contact your EDR Account Executive for more information

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CITCO PETROLEUM COMPANY (Continued)

1000236063

MANIFEST TRA :

Report Year: 2004
Generator EPA ID: IND095267381
Page Number of Report: 1
Transporter's EPA ID: IND000646943
Num Of Tranporters Used: 1

Report Year: 2004
Generator EPA ID: IND095267381
Page Number of Report: 2
Transporter's EPA ID: IND000646943
Num Of Tranporters Used: 1

EPA ID: IND095267381
Flag: SHIP
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND095267381
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 178
Handler Mailing City: EAST CHICAGO
Handler Mailing State: IN
Handler Mailing Zip: 46312
Contact Last Name: BUCKNER
Contact First Name: SCOTT B
Contact Telephone: 847-439-3589
Contact Type: A

EPA ID #: IND095267381
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 178
Handler Mailing City: EAST CHICAGO
Handler Mailing State: IN
Handler Mailing Zip: 46312
Contact Last Name: BUCKNER
Contact First Name: SCOTT B
Contact Telephone: 847-439-3589
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000236063

Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: IND095267381
Waste Description Shipped: WASTE FLAMMABLE LIQUID, GASOLINE SLUDGE FROM CLEANING PETROLEUM STORAGE TANKS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: D001
Tons Of Waste Shipped Year: 4
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: WASTE FLAMMABLE LIQUID, GASOLINE SLUDGE FROM CLEANING PETROLEUM STORAGE TANKS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: D018
Tons Of Waste Shipped Year: 4
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: HAZ WASTE SOLID, REMOVAL/REPLACEMENT OF TANK SEALS/WIPERS FROM PETROLEUM STORAGE TANKS
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: D001
Tons Of Waste Shipped Year: 1
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: HAZ WASTE SOLID, REMOVAL/REPLACEMENT OF TANK SEALS/WIPERS FROM PETROLEUM STORAGE TANKS
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: D018
Tons Of Waste Shipped Year: 1
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: MISCELLANEOUS MATERIALS (RAGS,SORBENT PADS, OIL DRI,ETC.) USED TO CLEANUP AFTER MAINTENANCE ACTIVITIES AND NON-MAINTENANCE ACTIVITIES
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: D001
Tons Of Waste Shipped Year: 0.229

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000236063

TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported
IN MANIFEST SHIPPER: Has 5 more record(s) for this section. Please contact your EDR Account Executive for more information

MANIFEST TRA :

Report Year: 2004
Generator EPA ID: IND095267381
Page Number of Report: 1
Transporter's EPA ID: IND000646943
Num Of Transporters Used: 1

Report Year: 2004
Generator EPA ID: IND095267381
Page Number of Report: 2
Transporter's EPA ID: IND000646943
Num Of Transporters Used: 1

EPA ID: IND095267381
Flag: SHIP
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND095267381
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 178
Handler Mailing City: EAST CHICAGO
Handler Mailing State: IN
Handler Mailing Zip: 46312
Contact Last Name: BUCKNER
Contact First Name: SCOTT B
Contact Telephone: 847-439-3589
Contact Type: A

EPA ID #: IND095267381
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 178
Handler Mailing City: EAST CHICAGO
Handler Mailing State: IN
Handler Mailing Zip: 46312
Contact Last Name: BUCKNER
Contact First Name: SCOTT B
Contact Telephone: 847-439-3589
Contact Type: B

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000236063

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: IND095267381
Waste Description Shipped: WASTE FLAMMABLE LIQUID, GASOLINE SLUDGE FROM CLEANING PETROLEUM STORAGE TANKS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: D001
Tons Of Waste Shipped Year: 4
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: WASTE FLAMMABLE LIQUID, GASOLINE SLUDGE FROM CLEANING PETROLEUM STORAGE TANKS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: D018
Tons Of Waste Shipped Year: 4
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: HAZ WASTE SOLID, REMOVAL/REPLACEMENT OF TANK SEALS/WIPERS FROM PETROLEUM STORAGE TANKS
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: D001
Tons Of Waste Shipped Year: 1
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: HAZ WASTE SOLID, REMOVAL/REPLACEMENT OF TANK SEALS/WIPERS FROM PETROLEUM STORAGE TANKS
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: D018
Tons Of Waste Shipped Year: 1
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000236063

Waste Description Shipped: MISCELLANEOUS MATERIALS (RAGS,SORBENT PADS, OIL DRI,ETC.) USED TO CLEANUP AFTER MAINTENANCE ACTIVITIES AND NON-MAINTENANCE ACTIVITIES
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: D001
Tons Of Waste Shipped Year: 0.229
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported
IN MANIFEST SHIPPER: Has 5 more record(s) for this section. Please contact your EDR Account Executive for more information

MANIFEST TRA :

Report Year: 2004
Generator EPA ID: IND095267381
Page Number of Report: 1
Transporter's EPA ID: IND000646943
Num Of Transporters Used: 1

Report Year: 2004
Generator EPA ID: IND095267381
Page Number of Report: 2
Transporter's EPA ID: IND000646943
Num Of Transporters Used: 1

EPA ID: IND095267381
Flag: SHIP
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND095267381
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 178
Handler Mailing City: EAST CHICAGO
Handler Mailing State: IN
Handler Mailing Zip: 46312
Contact Last Name: BUCKNER
Contact First Name: SCOTT B
Contact Telephone: 847-439-3589
Contact Type: A

EPA ID #: IND095267381
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 178
Handler Mailing City: EAST CHICAGO
Handler Mailing State: IN

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000236063

Handler Mailing Zip: 46312
Contact Last Name: BUCKNER
Contact First Name: SCOTT B
Contact Telephone: 847-439-3589
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: IND095267381
Waste Description Shipped: WASTE FLAMMABLE LIQUID, GASOLINE SLUDGE FROM CLEANING PETROLEUM STORAGE TANKS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: D001
Tons Of Waste Shipped Year: 4
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: WASTE FLAMMABLE LIQUID, GASOLINE SLUDGE FROM CLEANING PETROLEUM STORAGE TANKS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: D018
Tons Of Waste Shipped Year: 4
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: HAZ WASTE SOLID, REMOVAL/REPLACEMENT OF TANK SEALS/WIPERS FROM PETROLEUM STORAGE TANKS
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: D001
Tons Of Waste Shipped Year: 1
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: HAZ WASTE SOLID, REMOVAL/REPLACEMENT OF TANK SEALS/WIPERS FROM PETROLEUM STORAGE TANKS
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CITCO PETROLEUM COMPANY (Continued)

1000236063

Waste Code: D018
Tons Of Waste Shipped Year: 1
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: MISCELLANEOUS MATERIALS (RAGS,SORBENT PADS, OIL DRI,ETC.) USED TO
CLEANUP AFTER MAINTENANCE ACTIVITIES AND NON-MAINTENANCE ACTIVITIES
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: D001
Tons Of Waste Shipped Year: 0.229
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported
IN MANIFEST SHIPPER: Has 5 more record(s) for this section. Please contact your EDR Account
Executive for more information

MANIFEST TRA :

Report Year: 2004
Generator EPA ID: IND095267381
Page Number of Report: 1
Transporter's EPA ID: IND000646943
Num Of Transporters Used: 1

Report Year: 2004
Generator EPA ID: IND095267381
Page Number of Report: 2
Transporter's EPA ID: IND000646943
Num Of Transporters Used: 1

EPA ID: IND095267381
Flag: SHIP
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND095267381
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 178
Handler Mailing City: EAST CHICAGO
Handler Mailing State: IN
Handler Mailing Zip: 46312
Contact Last Name: BUCKNER
Contact First Name: SCOTT B
Contact Telephone: 847-439-3589
Contact Type: A

EPA ID #: IND095267381
Generator Type: LQG
Generator Status: Active
Transporter Type: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000236063

Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 178
Handler Mailing City: EAST CHICAGO
Handler Mailing State: IN
Handler Mailing Zip: 46312
Contact Last Name: BUCKNER
Contact First Name: SCOTT B
Contact Telephone: 847-439-3589
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: IND095267381
Waste Description Shipped: WASTE FLAMMABLE LIQUID, GASOLINE SLUDGE FROM CLEANING PETROLEUM STORAGE TANKS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: D001
Tons Of Waste Shipped Year: 4
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: WASTE FLAMMABLE LIQUID, GASOLINE SLUDGE FROM CLEANING PETROLEUM STORAGE TANKS
Shipped File Page Number: 1
Number Of TSD Facilities: 1
Waste Codes on Page Number: 2
Waste Code: D018
Tons Of Waste Shipped Year: 4
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

EPA ID: IND095267381
Waste Description Shipped: HAZ WASTE SOLID, REMOVAL/REPLACEMENT OF TANK SEALS/WIPERS FROM PETROLEUM STORAGE TANKS
Shipped File Page Number: 2
Number Of TSD Facilities: 1
Waste Codes on Page Number: 1
Waste Code: D001
Tons Of Waste Shipped Year: 1
TSD Facility EPA ID: IND000646943
Facility Address 2: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

1000236063

EPA ID:	IND095267381
Waste Description Shipped:	HAZ WASTE SOLID, REMOVAL/REPLACEMENT OF TANK SEALS/WIPERS FROM PETROLEUM STORAGE TANKS
Shipped File Page Number:	2
Number Of TSD Facilities:	1
Waste Codes on Page Number:	2
Waste Code:	D018
Tons Of Waste Shipped Year:	1
TSD Facility EPA ID:	IND000646943
Facility Address 2:	Not reported
EPA ID:	IND095267381
Waste Description Shipped:	MISCELLANEOUS MATERIALS (RAGS,SORBENT PADS, OIL DRI,ETC.) USED TO CLEANUP AFTER MAINTENANCE ACTIVITIES AND NON-MAINTENANCE ACTIVITIES
Shipped File Page Number:	1
Number Of TSD Facilities:	1
Waste Codes on Page Number:	1
Waste Code:	D001
Tons Of Waste Shipped Year:	0.229
TSD Facility EPA ID:	IND000646943
Facility Address 2:	Not reported
IN MANIFEST SHIPPER:	Has 5 more record(s) for this section. Please contact your EDR Account Executive for more information

MANIFEST TRA :

Report Year:	2004
Generator EPA ID:	IND095267381
Page Number of Report:	1
Transporter's EPA ID:	IND000646943
Num Of Tranporters Used:	1

Report Year:	2004
Generator EPA ID:	IND095267381
Page Number of Report:	2
Transporter's EPA ID:	IND000646943
Num Of Tranporters Used:	1

[Click this hyperlink](#) while viewing on your computer to access
7 additional IN MANIFEST: record(s) in the EDR Site Report.

IN TIER 2:

Facility ID:	1623
Chemical Name:	Gasoline
CAS Number:	8006619
Max Daily Amount:	10
Storage Location:	tanks 3,4,7,8,9,10
Storage Location:	tanks 33,34,35,37,38,39
Storage Location:	tanks 40,41,43,44,45,46,47,48
Storage Location:	tanks 51,52,53,54,55,57,58,59
Owner Name:	Citgo Petroleum Corp.
Owner Phone:	8324864000
Contact Name:	Pete Drivas
Contact Phone:	2193980734
SIC Code:	5171

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

CITGO PETROLEUM COMPANY (Continued)

1000236063

Facility ID: 1623
Chemical Name: Fuel Oil no. 2-D
CAS Number: 68476346
Max Daily Amount: 07
Storage Location: tank 30
Owner Name: Citgo Petroleum Corp.
Owner Phone: 8324864000
Contact Name: Pete Drivas
Contact Phone: 2193980734
SIC Code: 5171

Facility ID: 1623
Chemical Name: 2-(2-Methoxyethoxy)Ethanol
CAS Number: 111773
Max Daily Amount: 04
Storage Location: tank 14
Owner Name: Citgo Petroleum Corp.
Owner Phone: 8324864000
Contact Name: Pete Drivas
Contact Phone: 2193980734
SIC Code: 5171

Facility ID: 1623
Chemical Name: Other Chemical 11
CAS Number: 999011
Max Daily Amount: 09
Storage Location: tanks 2,6, 13,14,15,16,17,18
Storage Location: tanks 20,21,22,25,26,27,28,32,42
Storage Location: CITGO jet turbine fuel all grades
Owner Name: Citgo Petroleum Corp.
Owner Phone: 8324864000
Contact Name: Pete Drivas
Contact Phone: 2193980734
SIC Code: 5171

Facility ID: 1623
Chemical Name: Other Chemical 15
CAS Number: 999015
Max Daily Amount: 09
Storage Location: tanks 1,11,19,13,36,56
Storage Location: CITGO No 2 Diesel fuel low sulfur
Storage Location: all grades
Owner Name: Citgo Petroleum Corp.
Owner Phone: 8324864000
Contact Name: Pete Drivas
Contact Phone: 2193980734
SIC Code: 5171

Facility ID: 1623
Chemical Name: Other Chemical 17
CAS Number: 999017
Max Daily Amount: 06
Storage Location: tank 88
Storage Location: Petroleum Contact water
Owner Name: Citgo Petroleum Corp.
Owner Phone: 8324864000
Contact Name: Pete Drivas

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CITCO PETROLEUM COMPANY (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000236063

Contact Phone: 2193980734
SIC Code: 5171

Facility ID: 1623
Chemical Name: Other Chemical 35
CAS Number: 999035
Max Daily Amount: 04
Storage Location: manifold slop tank
Storage Location: pour back tank at loading rack
Storage Location: pipeline interface/transmix
Owner Name: Citgo Petroleum Corp.
Owner Phone: 8324864000
Contact Name: Pete Drivas
Contact Phone: 2193980734
SIC Code: 5171

27
SW
1/2-1
3685 ft.

GARY DEV CO INC
479 N CLINE AVE
GARY, IN 46406

CERCLIS 1000439903
RCRA-SQG IND0077005916
FINDS
RCRA-TSDF
RAATS
CORRACTS
IN MANIFEST

Relative:
Higher

Actual:
590 ft.

CERCLIS:
Site ID: 0501517
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Site Reassessment Ongoing

CERCLIS Site Contact Name(s):

Contact Name: ANITA BOSEMAN
Contact Tel: (312) 886-6941
Contact Title: On-Scene Coordinator (OSC)

CERCLIS Site Alias Name(s):

Alias Name: GARY LAND DEV LDFL
Alias Address: Not reported
IN
Alias Name: GARY DEV CO INC
Alias Address: Not reported
LAKE, IN

Site Description: Not reported

CERCLIS Assessment History:

Action: DISCOVERY
Date Started: Not reported
Date Completed: 04/01/1979
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 06/01/1983
Priority Level: High

Action: SITE INSPECTION
Date Started: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

GARY DEV CO INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000439903

Date Completed: 01/01/1984
Priority Level: NFRAP (No Further Remedial Action Planned)

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 09/28/1994
Priority Level: Not reported

Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 09/11/2002
Priority Level: Not reported

Action: REMOVAL
Date Started: 01/08/2002
Date Completed: 09/27/2002
Priority Level: Cleaned up

Action: ISSUE REQUEST LETTERS (104E)
Date Started: Not reported
Date Completed: 03/24/2003
Priority Level: Not reported

Action: NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started: Not reported
Date Completed: 09/23/2005
Priority Level: Not reported

RCRAInfo Corrective Action Summary:

Event: CA Prioritization, Facility or area was assigned a medium corrective action priority.
Event Date: 09/27/1991
Event: RFA Completed
Event Date: 09/30/1987
Event: RFA Determination Of Need For An RFI, RFI is Necessary;
Event Date: 09/30/1987

RCRAInfo:

Owner: NAME NOT REPORTED
(312) 555-1212
EPA ID: IND077005916
Contact: ENVIRONMENTAL COORDINATOR
(312) 555-1212

Classification: TSDF, Conditionally Exempt Small Quantity Generator
TSDF Activities: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

GARY DEV CO INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000439903

Violation Status: Violations exist

Regulation Violated:	Not reported
Area of Violation:	GENERATOR-RECORDKEEPING REQUIREMENTS
Date Violation Determined:	03/26/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	03/26/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	03/26/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	03/26/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	03/26/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	03/26/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-LAND BAN REQUIREMENTS
Date Violation Determined:	03/26/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-MANIFEST REQUIREMENTS
Date Violation Determined:	03/26/1997
Actual Date Achieved Compliance:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-LANDFILLS REQUIREMENTS
Date Violation Determined:	09/26/1996
Actual Date Achieved Compliance:	08/13/1997
Enforcement Action:	INITIAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	05/30/1986
Penalty Type:	Proposed Monetary Penalty
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	04/08/1996
Penalty Type:	Proposed Monetary Penalty
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	11/08/1996
Penalty Type:	Proposed Monetary Penalty
Enforcement Action:	FINAL CONSENT DECREES
Enforcement Action Date:	07/30/1997
Penalty Type:	Proposed Monetary Penalty
Enforcement Action:	EPA RCRA TO EPA CERCLA ADMINISTRATIVE REFERRAL

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

GARY DEV CO INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000439903

Enforcement Action Date:	08/13/1997
Penalty Type:	Proposed Monetary Penalty
Regulation Violated:	Not reported
Area of Violation:	TSD-LANDFILLS REQUIREMENTS
Date Violation Determined:	09/26/1996
Actual Date Achieved Compliance:	08/13/1997
Enforcement Action:	INITIAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	05/30/1986
Penalty Type:	Proposed Monetary Penalty
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	04/08/1996
Penalty Type:	Proposed Monetary Penalty
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	11/08/1996
Penalty Type:	Proposed Monetary Penalty
Enforcement Action:	FINAL CONSENT DECREES
Enforcement Action Date:	07/30/1997
Penalty Type:	Proposed Monetary Penalty
Enforcement Action:	EPA RCRA TO EPA CERCLA ADMINISTRATIVE REFERRAL
Enforcement Action Date:	08/13/1997
Penalty Type:	Proposed Monetary Penalty
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	04/01/1985
Penalty Type:	Proposed Monetary Penalty
Regulation Violated:	Not reported
Area of Violation:	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
Date Violation Determined:	02/21/1996
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
Date Violation Determined:	08/09/1995
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-RECORDKEEPING REQUIREMENTS
Date Violation Determined:	02/01/1995
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS
Date Violation Determined:	02/01/1995
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS
Date Violation Determined:	02/01/1995
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

GARY DEV CO INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000439903

Date Violation Determined:	02/01/1995
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
Date Violation Determined:	02/25/1994
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-GENERAL STANDARDS
Date Violation Determined:	01/13/1993
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
Date Violation Determined:	09/11/1992
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS
Date Violation Determined:	02/18/1992
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined:	02/18/1992
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
Date Violation Determined:	02/18/1992
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-GROUNDWATER MONITORING REQUIREMENTS
Date Violation Determined:	02/18/1992
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS
Date Violation Determined:	02/18/1992
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-CONTINGENCY PLAN REQUIREMENTS
Date Violation Determined:	02/18/1992
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-GENERAL STANDARDS
Date Violation Determined:	02/18/1992
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS
Date Violation Determined:	02/18/1992
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported
Area of Violation:	TSD-PREPAREDNESS/PREVENTION REQUIREMENTS
Date Violation Determined:	02/18/1992
Actual Date Achieved Compliance:	05/03/2001
Regulation Violated:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

GARY DEV CO INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000439903

Area of Violation: TSD-CORRECTIVE ACTION COMPLIANCE SCHEDULE
Date Violation Determined: 06/17/1985
Actual Date Achieved Compliance: 05/03/2001
Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 04/01/1985
Penalty Type: Not reported
Regulation Violated: Not reported
Area of Violation: TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
Date Violation Determined: 06/17/1985
Actual Date Achieved Compliance: 05/03/2001
Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 04/01/1985
Penalty Type: Not reported
Regulation Violated: Not reported
Area of Violation: TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
Date Violation Determined: 06/17/1985
Actual Date Achieved Compliance: 05/03/2001
Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 04/01/1985
Penalty Type: Not reported
Regulation Violated: Not reported
Area of Violation: TSD-GROUNDWATER MONITORING REQUIREMENTS
Date Violation Determined: 06/17/1985
Actual Date Achieved Compliance: 05/03/2001
Enforcement Action: INITIAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 05/30/1986
Penalty Type: Proposed Monetary Penalty
Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date: 04/08/1996
Penalty Type: Proposed Monetary Penalty
Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 11/08/1996
Penalty Type: Proposed Monetary Penalty
Enforcement Action: FINAL CONSENT DECREES
Enforcement Action Date: 07/30/1997
Penalty Type: Proposed Monetary Penalty
Enforcement Action: EPA RCRA TO EPA CERCLA ADMINISTRATIVE REFERRAL
Enforcement Action Date: 08/13/1997
Penalty Type: Proposed Monetary Penalty
Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 04/01/1985
Penalty Type: Proposed Monetary Penalty
Regulation Violated: Not reported
Area of Violation: TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined: 06/17/1985
Actual Date Achieved Compliance: 05/03/2001
Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 04/01/1985
Penalty Type: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number
EPA ID Number

GARY DEV CO INC (Continued)

1000439903

Penalty Summary:

Penalty Description	Penalty Date	Penalty Amount	Lead Agency
Final Monetary Penalty	7/30/1997	86000	EPA
Final Monetary Penalty	4/8/1996	86000	EPA

There are 34 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Not a Significant Non-Complier (SNC)	TSD-LANDFILLS REQUIREMENTS	19970813
	TSD-LANDFILLS REQUIREMENTS	19970813
Compliance Evaluation Inspection	GENERATOR-PRE-TRANSPORT REQUIREMENTS	
	GENERATOR-PRE-TRANSPORT REQUIREMENTS	
	GENERATOR-RECORDKEEPING REQUIREMENTS	
	GENERATOR-PRE-TRANSPORT REQUIREMENTS	
	TSD-LAND BAN REQUIREMENTS	
	GENERATOR-PRE-TRANSPORT REQUIREMENTS	
	GENERATOR-MANIFEST REQUIREMENTS	
	GENERATOR-PRE-TRANSPORT REQUIREMENTS	
CDI	TSD-LANDFILLS REQUIREMENTS	19970813
	TSD-LANDFILLS REQUIREMENTS	19970813
A Significant Non-Complier (SNC)	TSD-LANDFILLS REQUIREMENTS	19970813
	TSD-LANDFILLS REQUIREMENTS	19970813
Compliance Schedule Evaluation	TSD-LANDFILLS REQUIREMENTS	19970813
	TSD-LANDFILLS REQUIREMENTS	19970813
Financial Record Review	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	20010503
Financial Record Review	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	20010503
Compliance Evaluation Inspection	TSD-OTHER REQUIREMENTS	20010503
	TSD-OTHER REQUIREMENTS	20010503
	TSD-PREPAREDNESS/PREVENTION REQUIREMENTS	20010503
	TSD-OTHER REQUIREMENTS	20010503
	GENERATOR-RECORDKEEPING REQUIREMENTS	20010503
Financial Record Review	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	20010503
Financial Record Review	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	20010503
Compliance Evaluation Inspection	TSD-GENERAL STANDARDS	20010503
Financial Record Review	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	20010503
Compliance Evaluation Inspection	TSD-OTHER REQUIREMENTS	20010503
	GENERATOR-GENERAL REQUIREMENTS	20010503
	TSD-CONTINGENCY PLAN REQUIREMENTS	20010503
	TSD-OTHER REQUIREMENTS	20010503
	TSD-PREPAREDNESS/PREVENTION REQUIREMENTS	20010503
	TSD-OTHER REQUIREMENTS	20010503
	TSD-GROUNDWATER MONITORING REQUIREMENTS	20010503
	TSD-GENERAL STANDARDS	20010503
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	20010503
Compliance Evaluation Inspection	TSD-GROUNDWATER MONITORING REQUIREMENTS	20010503
	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	20010503
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	20010503
	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	20010503
	TSD-CORRECTIVE ACTION COMPLIANCE SCHEDULE	20010503

FINDS:

Other Pertinent Environmental Activity Identified at Site

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

GARY DEV CO INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000439903

information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and its Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (I-DEM) has implemented the Indiana-Facility Registry System (I-FRS). The I-FRS provides the interface and processes to link facility data monitored by multiple State and EPA program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node

CORRACTS:

EPA ID: IND077005916
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/27/1991
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): Not reported

EPA ID: IND077005916
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/30/1987
Action: CA050 - RFA Completed
NAICS Code(s): Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

GARY DEV CO INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000439903

EPA ID: IND077005916
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/30/1987
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): Not reported

IN MANIFEST:

EPA ID: IND077005916
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND077005916
Generator Type: CEG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 6056
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: BOSEMAN
Contact First Name: ANITA
Contact Telephone: 312-353-9176
Contact Type: B

EPA ID #: IND077005916
Generator Type: CEG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 6056
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: BOSEMAN
Contact First Name: ANITA
Contact Telephone: 312-353-9176
Contact Type: B

MANIFEST REC:

Report Year: Not reported
EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

GARY DEV CO INC (Continued)

1000439903

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Tranporters Used: Not reported

EPA ID: IND077005916
Flag: HANDLER
Facility Address 2: Not reported

MANIFEST HANDLER :

EPA ID #: IND077005916
Generator Type: CEG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 6056
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
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Contact First Name: ANITA
Contact Telephone: 312-353-9176
Contact Type: B

EPA ID #: IND077005916
Generator Type: CEG
Generator Status: Active
Transporter Type: Not reported
Transporter Status: Non Active
TSD Type: Interim or Enforcement TSD
TSD Status: Non Active
Handler Mailing Address: PO BOX 6056
Handler Mailing City: GARY
Handler Mailing State: IN
Handler Mailing Zip: 46406
Contact Last Name: BOSEMAN
Contact First Name: ANITA
Contact Telephone: 312-353-9176
Contact Type: B

MANIFEST REC:

Report Year: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

GARY DEV CO INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000439903

EPA ID: Not reported
Page Number: Not reported
Sub Page: Not reported
Generator EPA ID: Not reported
Waste Description: Not reported
Quantity of Waste: Not reported
Unit of Measure: Not reported

MANIFEST SHIPPER:

EPA ID: Not reported
Waste Description Shipped: Not reported
Shipped File Page Number: Not reported
Number Of TSD Facilities: Not reported
Waste Codes on Page Number: Not reported
Waste Code: Not reported
Tons Of Waste Shipped Year: Not reported
TSD Facility EPA ID: Not reported
Facility Address 2: Not reported

MANIFEST TRA :

Report Year: Not reported
Generator EPA ID: Not reported
Page Number of Report: Not reported
Transporter's EPA ID: Not reported
Num Of Transporters Used: Not reported

28
SSE
1/2-1
4051 ft.

NIKE C-45 - GARY AIRPORT
GARY, IN

FUDS 1007211470
N/A

Relative:
Higher

Actual:
590 ft.

FUDS:

Federal Facility ID: IN9799F9515
Facility Name: NIKE C-45 - GARY AIRPORT
City: GARY
State: IN
EPA Region: 5
County: LAKE
Congressional District: 01
US Army District: Louisville District (LRL
Fiscal Year: 2005
Telephone: 502-315-6766
NPL Status: Not Listed
Description: The 100.32-acre Nike Site C-45 is located in Gary, Lake Coun
RAB: Not reported
History: The Nike Site C-45 was acquired in February 1954. It was use
Current Owner: FEDERAL
CTC: 534.71
Current Prog: Not reported
Future Prog: Not reported
Latitude: 41.6161111
Longitude: -87.4127778

FUDS Description Details:

The 100.32-acre Nike Site C-45 is located in Gary, Lake County,

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NIKE C-45 - GARY AIRPORT (Continued)

EDR ID Number
EPA ID Number

Database(s)

1007211470

Indiana, inside the triangle formed by U.S. 12, Interstate 80/90 and Indiana 912. The property is currently being utilized exclusively for the Gary Chicago Airport.

FUDS History Details:

The Nike Site C-45 was acquired in February 1954. It was used for assembly, launching, and control of guided missiles for air defense. There is a 3,000-gallon UST and a 6,000-gallon UST, as well as two places with contaminated soil.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
GARY	1001817018	INDOT	15TH AVE OVER SR 912	46406	RCRA-SQG, FINDS, IN MANIFEST
GARY	U003095291	GARY SANITARY DISTRICT	3600 W 3RD AVE	46402	LUST, IN Spills
GARY	1001817019	INDOT	SR 912 OVER 9TH AVE	46406	RCRA-SQG, FINDS, IN MANIFEST
GARY	1006812529	9TH AVE ABANDONED DRUM SITE	9TH AVE AND CLINE	46406	CERCLIS
GARY	1000841346	NIPSCO DH MITCHELL GEN STA	CLARK RD AND LAKE MICHIGAN	46402	RCRA-SQG, FINDS, RCRA-TSDF, CORRACTS, IN MANIFEST, AIRS
GARY	1000379237	HOUSE'S JUNK YARD	E OF CLARK ST 3/8MI N OF JCT	46406	CERCLIS, FINDS

EPA Waste Codes Addendum

Code	Description
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D004	ARSENIC
D007	CHROMIUM
D008	LEAD
D018	BENZENE
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F002	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

EPA Waste Codes Addendum

Code	Description
F007	SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS
F008	PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
F009	SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/25/2007	Source: EPA
Date Data Arrived at EDR: 01/31/2007	Telephone: N/A
Date Made Active in Reports: 03/12/2007	Last EDR Contact: 05/03/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 05/03/2007
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/28/2006	Source: EPA
Date Data Arrived at EDR: 01/31/2007	Telephone: N/A
Date Made Active in Reports: 03/12/2007	Last EDR Contact: 05/03/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 05/21/2007
Number of Days to Update: 56	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/27/2007	Source: EPA
Date Data Arrived at EDR: 03/21/2007	Telephone: 703-603-8960
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 03/21/2007
Number of Days to Update: 37	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 03/21/2007	Source: EPA
Date Data Arrived at EDR: 04/27/2007	Telephone: 703-603-8960
Date Made Active in Reports: 05/25/2007	Last EDR Contact: 03/19/2007
Number of Days to Update: 28	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/14/2007	Source: EPA
Date Data Arrived at EDR: 03/20/2007	Telephone: 800-424-9346
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 03/05/2007
Number of Days to Update: 38	Next Scheduled EDR Contact: 06/04/2007
	Data Release Frequency: Quarterly

RCRA: Resource Conservation and Recovery Act Information

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/13/2006	Source: EPA
Date Data Arrived at EDR: 06/28/2006	Telephone: 312-886-6186
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 05/16/2007
Number of Days to Update: 56	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Quarterly

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2006	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/24/2007	Telephone: 202-267-2180
Date Made Active in Reports: 03/12/2007	Last EDR Contact: 04/24/2007
Number of Days to Update: 47	Next Scheduled EDR Contact: 07/23/2007
	Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2005	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 04/17/2007	Telephone: 202-366-4555
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 04/17/2007
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Annually

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 04/20/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/26/2007	Telephone: 703-603-8905
Date Made Active in Reports: 05/25/2007	Last EDR Contact: 04/02/2007
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 04/20/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/26/2007	Telephone: 703-603-8905
Date Made Active in Reports: 05/25/2007	Last EDR Contact: 04/02/2007
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 703-692-8801
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/11/2007
Number of Days to Update: 62	Next Scheduled EDR Contact: 08/06/2007
	Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2005	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 09/20/2006	Telephone: 202-528-4285
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 04/02/2007
Number of Days to Update: 63	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Varies

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 04/04/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/04/2007	Telephone: 202-566-2777
Date Made Active in Reports: 05/25/2007	Last EDR Contact: 03/12/2007
Number of Days to Update: 51	Next Scheduled EDR Contact: 06/11/2007
	Data Release Frequency: Semi-Annually

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 08/23/2006	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 03/06/2007	Telephone: Varies
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 04/23/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 07/23/2007
	Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/27/2007	Source: EPA
Date Data Arrived at EDR: 03/27/2007	Telephone: 703-416-0223
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 03/27/2007
Number of Days to Update: 31	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 11/08/2006	Telephone: 505-845-0011
Date Made Active in Reports: 01/29/2007	Last EDR Contact: 05/17/2007
Number of Days to Update: 82	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 06/22/2006	Telephone: 202-566-0250
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 04/27/2007
Number of Days to Update: 62	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002	Source: EPA
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-260-5521
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/16/2007
Number of Days to Update: 46	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 02/26/2007	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-566-1667
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 03/19/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 02/26/2007	Source: EPA
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-566-1667
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 03/19/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2005	Source: EPA
Date Data Arrived at EDR: 03/13/2007	Telephone: 202-564-4203
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 04/12/2007
Number of Days to Update: 45	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Annually

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 03/08/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/12/2007	Telephone: 202-564-6023
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 32	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 05/01/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/03/2007	Telephone: 202-343-9775
Date Made Active in Reports: 05/25/2007	Last EDR Contact: 05/03/2007
Number of Days to Update: 22	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/01/2006	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 01/08/2007	Telephone: 202-307-1000
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/22/2007
Number of Days to Update: 3	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 03/19/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/21/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/03/2007	Telephone: 202-564-5088
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 04/16/2007
Number of Days to Update: 41	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Quarterly

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005	Source: Department of the Navy
Date Data Arrived at EDR: 12/11/2006	Telephone: 843-820-7326
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 03/26/2007
Number of Days to Update: 31	Next Scheduled EDR Contact: 06/11/2007
	Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 02/14/2007	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 02/28/2007	Telephone: 202-366-4595
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 05/30/2007
Number of Days to Update: 41	Next Scheduled EDR Contact: 08/27/2007
	Data Release Frequency: Varies

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/17/2006	Source: EPA
Date Data Arrived at EDR: 11/29/2006	Telephone: 202-566-0500
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/25/2007
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/06/2007
	Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/05/2007	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 04/25/2007	Telephone: 301-415-7169
Date Made Active in Reports: 05/25/2007	Last EDR Contact: 04/02/2007
Number of Days to Update: 30	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Quarterly

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/06/2007	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 03/28/2007	Telephone: 303-231-5959
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 03/28/2007
Number of Days to Update: 47	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/18/2007	Source: EPA
Date Data Arrived at EDR: 01/23/2007	Telephone: (312) 353-2000
Date Made Active in Reports: 02/27/2007	Last EDR Contact: 05/14/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 03/05/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 06/04/2007
	Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2005	Source: EPA/NTIS
Date Data Arrived at EDR: 03/06/2007	Telephone: 800-424-9346
Date Made Active in Reports: 04/13/2007	Last EDR Contact: 03/06/2007
Number of Days to Update: 38	Next Scheduled EDR Contact: 06/11/2007
	Data Release Frequency: Biennially

STATE AND LOCAL RECORDS

SHWS: List of Hazardous Waste Response Sites Scored Using the Indiana Scoring Model

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 04/21/2006	Source: Department of Environmental Management
Date Data Arrived at EDR: 05/16/2006	Telephone: 317-308-3052
Date Made Active in Reports: 06/12/2006	Last EDR Contact: 04/18/2007
Number of Days to Update: 27	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Annually

SWF/LF: Permitted Solid Waste Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 01/04/2007	Source: Department of Environmental Management
Date Data Arrived at EDR: 01/25/2007	Telephone: 317-232-0066
Date Made Active in Reports: 02/13/2007	Last EDR Contact: 04/27/2007
Number of Days to Update: 19	Next Scheduled EDR Contact: 07/09/2007
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Lust Leaking Underground Storage Tank List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 03/26/2007	Source: Department of Environmental Management
Date Data Arrived at EDR: 03/28/2007	Telephone: 317-232-8900
Date Made Active in Reports: 04/25/2007	Last EDR Contact: 03/28/2007
Number of Days to Update: 28	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Annually

UST: Indiana Registered Underground Storage Tanks

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 03/26/2007	Source: Department of Environmental Management
Date Data Arrived at EDR: 03/28/2007	Telephone: 317-308-3008
Date Made Active in Reports: 04/19/2007	Last EDR Contact: 03/28/2007
Number of Days to Update: 22	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Quarterly

BULK: Registered Bulk Fertilizer and Pesticide Storage Facilities

A listing of registered dry or liquid bulk fertilizer and pesticide storage facilities.

Date of Government Version: 03/12/2007	Source: Office of Indiana State Chemist
Date Data Arrived at EDR: 03/14/2007	Telephone: 765-494-0579
Date Made Active in Reports: 04/25/2007	Last EDR Contact: 03/12/2007
Number of Days to Update: 42	Next Scheduled EDR Contact: 06/11/2007
	Data Release Frequency: Varies

MANIFEST: Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a treatment, storage, and disposal facility.

Date of Government Version: 12/31/2005	Source: Department of Environmental Management
Date Data Arrived at EDR: 01/29/2007	Telephone: 317-233-4624
Date Made Active in Reports: 02/13/2007	Last EDR Contact: 04/30/2007
Number of Days to Update: 15	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Annually

SPILLS: Spills Incidents

Oil, hazardous, or objectionable materials that may be released to soil and water.

Date of Government Version: 03/26/2007	Source: Department of Environmental Management
Date Data Arrived at EDR: 03/28/2007	Telephone: 317-308-3038
Date Made Active in Reports: 04/25/2007	Last EDR Contact: 03/28/2007
Number of Days to Update: 28	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Semi-Annually

AUL: Sites with Restrictions

Activity and use limitations include both engineering controls and institutional controls. A listing of Comfort/Site Status Letter sites that have been issued with controls.

Date of Government Version: 03/28/2007	Source: Department of Environmental Management
Date Data Arrived at EDR: 03/28/2007	Telephone: 317-232-8603
Date Made Active in Reports: 04/25/2007	Last EDR Contact: 03/26/2007
Number of Days to Update: 28	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

VCP: Voluntary Remediation Program Site List

A current list of Voluntary Remediation Program sites that are no longer confidential.

Date of Government Version: 02/01/2007	Source: Department of Environmental Management
Date Data Arrived at EDR: 05/08/2007	Telephone: 317-234-0966
Date Made Active in Reports: 05/30/2007	Last EDR Contact: 05/08/2007
Number of Days to Update: 22	Next Scheduled EDR Contact: 08/06/2007
	Data Release Frequency: Semi-Annually

DRYCLEANERS: Drycleaner Facility Listing

A list of drycleaners involved in the Indiana 5-Star Environmental Recognition Program. It is a voluntary program that ranks participating drycleaners on a scale of one to five stars. The program recognizes those drycleaners willing to do more for the environment and worker safety than the rules require. These drycleaners are going above and beyond the rules to protect the environment, their employees and their neighbors and customers.

Date of Government Version: 10/17/2006	Source: Department of Environmental Management
Date Data Arrived at EDR: 10/25/2006	Telephone: 800-988-7901
Date Made Active in Reports: 12/06/2006	Last EDR Contact: 04/09/2007
Number of Days to Update: 42	Next Scheduled EDR Contact: 07/09/2007
	Data Release Frequency: Varies

BROWNFIELDS: Brownfields Site List

A brownfield site is an industrial or commercial property that is abandoned, inactive, or underutilized, on which expansion or redevelopment is complicated due to the actual or perceived environmental contamination.

Date of Government Version: 03/28/2007	Source: Department of Environmental Management
Date Data Arrived at EDR: 03/28/2007	Telephone: 317-233-2570
Date Made Active in Reports: 04/25/2007	Last EDR Contact: 03/26/2007
Number of Days to Update: 28	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Semi-Annually

AIRS: Permitted Sources & Emissions Listing

Current permitted sources and emissions inventory information.

Date of Government Version: 11/14/2006	Source: Department of Environmental Management
Date Data Arrived at EDR: 11/20/2006	Telephone: 317-233-0185
Date Made Active in Reports: 12/28/2006	Last EDR Contact: 05/14/2007
Number of Days to Update: 38	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Varies

TIER 2: Tier 2 Facility Listing

A listing of facilities which store or manufacture hazardous materials that submit a chemical inventory report.

Date of Government Version: 12/27/2006	Source: Department of Environmental Management
Date Data Arrived at EDR: 12/27/2006	Telephone: 317-233-0066
Date Made Active in Reports: 02/13/2007	Last EDR Contact: 03/26/2007
Number of Days to Update: 48	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Varies

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 02/06/2006	Telephone: 202-208-3710
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/11/2007
Number of Days to Update: 339	Next Scheduled EDR Contact: 08/06/2007
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 02/19/2007	Source: EPA Region 8
Date Data Arrived at EDR: 02/27/2007	Telephone: 303-312-6271
Date Made Active in Reports: 04/04/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 36	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/06/2006	Source: EPA Region 7
Date Data Arrived at EDR: 10/04/2006	Telephone: 913-551-7003
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 05/21/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/04/2005	Source: EPA Region 6
Date Data Arrived at EDR: 01/21/2005	Telephone: 214-665-6597
Date Made Active in Reports: 02/28/2005	Last EDR Contact: 05/21/2007
Number of Days to Update: 38	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Minnesota, Mississippi and North Carolina.

Date of Government Version: 03/20/2007	Source: EPA Region 4
Date Data Arrived at EDR: 04/16/2007	Telephone: 404-562-8677
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 28	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 12/01/2006	Source: EPA Region 1
Date Data Arrived at EDR: 12/01/2006	Telephone: 617-918-1313
Date Made Active in Reports: 01/29/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 59	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 03/01/2007	Source: EPA Region 10
Date Data Arrived at EDR: 03/01/2007	Telephone: 206-553-2857
Date Made Active in Reports: 04/04/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/30/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/30/2007	Telephone: 415-972-3372
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 28	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R10: Underground Storage Tanks on Indian Land

Date of Government Version: 03/01/2007	Source: EPA Region 10
Date Data Arrived at EDR: 03/01/2007	Telephone: 206-553-2857
Date Made Active in Reports: 04/04/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

Date of Government Version: 03/26/2007	Source: EPA Region 9
Date Data Arrived at EDR: 03/27/2007	Telephone: 415-972-3368
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 31	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land

Date of Government Version: 03/20/2007	Source: EPA Region 4
Date Data Arrived at EDR: 04/16/2007	Telephone: 404-562-9424
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 28	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Semi-Annually

INDIAN UST R6: Underground Storage Tanks on Indian Land

Date of Government Version: 01/11/2007	Source: EPA Region 6
Date Data Arrived at EDR: 01/12/2007	Telephone: 214-665-7591
Date Made Active in Reports: 01/29/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 17	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

A listing of underground storage tank locations on Indian Land.

Date of Government Version: 12/01/2006	Source: EPA, Region 1
Date Data Arrived at EDR: 12/01/2006	Telephone: 617-918-1313
Date Made Active in Reports: 01/29/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 59	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

Date of Government Version: 12/02/2004	Source: EPA Region 5
Date Data Arrived at EDR: 12/29/2004	Telephone: 312-886-6136
Date Made Active in Reports: 02/04/2005	Last EDR Contact: 05/21/2007
Number of Days to Update: 37	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

Date of Government Version: 02/19/2007	Source: EPA Region 8
Date Data Arrived at EDR: 02/27/2007	Telephone: 303-312-6137
Date Made Active in Reports: 04/04/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 36	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006	Source: EPA Region 7
Date Data Arrived at EDR: 10/04/2006	Telephone: 913-551-7003
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 05/21/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 02/17/2006
Date Made Active in Reports: 04/07/2006
Number of Days to Update: 49

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 03/16/2007
Next Scheduled EDR Contact: 06/11/2007
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 04/01/2007
Date Data Arrived at EDR: 04/05/2007
Date Made Active in Reports: 05/08/2007
Number of Days to Update: 33

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/05/2007
Next Scheduled EDR Contact: 07/02/2007
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 10/26/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/05/2007
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 03/02/2007
Next Scheduled EDR Contact: 05/28/2007
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 03/17/2006
Date Made Active in Reports: 06/06/2006
Number of Days to Update: 81

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/16/2007
Next Scheduled EDR Contact: 06/11/2007
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 04/09/2007
Date Data Arrived at EDR: 04/12/2007
Date Made Active in Reports: 04/27/2007
Number of Days to Update: 15

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 03/19/2007
Next Scheduled EDR Contact: 06/18/2007
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 04/03/2007
Date Made Active in Reports: 04/24/2007
Number of Days to Update: 21

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 05/14/2007
Next Scheduled EDR Contact: 08/13/2007
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 03/17/2006
Date Made Active in Reports: 05/02/2006
Number of Days to Update: 46

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 04/24/2007
Next Scheduled EDR Contact: 07/09/2007
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: PennWell Corporation
Telephone: (800) 823-6277

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: child Care Listing

Source: Family & Social Services Administration

Telephone: 317-232-4740

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

CONSERVATION CHEMICAL COMPANY
6500 INDUSTRIAL HIGHWAY
GARY, IN 46406

TARGET PROPERTY COORDINATES

Latitude (North):	41.62810 - 41° 37' 41.2"
Longitude (West):	87.4198 - 87° 25' 11.3"
Universal Transverse Mercator:	Zone 16
UTM X (Meters):	465030.5
UTM Y (Meters):	4608358.0
Elevation:	590 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	41087-F4 WHITING, IN
Most Recent Revision:	1998
South Map:	41087-E4 HIGHLAND, IN
Most Recent Revision:	1998

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

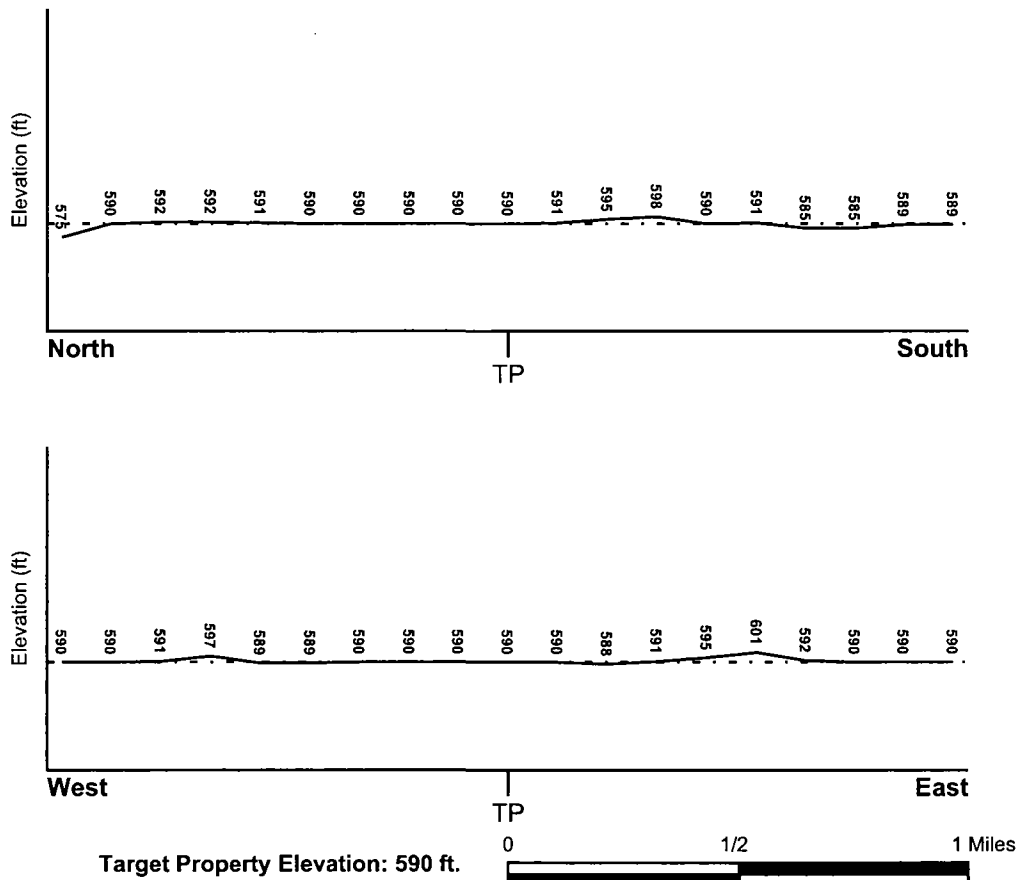
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General North

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Target Property County</u>	<u>FEMA Flood</u>
LAKE, IN	<u>Electronic Data</u>
	YES - refer to the Overview Map and Detail Map
 Flood Plain Panel at Target Property:	1801320017C
 Additional Panels in search area:	00000000000
	1801300004C
	1801300006C
	1801320018C

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic</u>
WHITING	<u>Data Coverage</u>
	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION</u>	<u>GENERAL DIRECTION</u>
Not Reported	<u>FROM TP</u>	<u>GROUNDWATER FLOW</u>

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era: Paleozoic
System: Silurian
Series: Middle Silurian (Niagoaran)
Code: S2 (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: COLOMA

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively. Soils have very high and high hydraulic conductivity and low water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: LOW

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	4 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 6.00	Max: 7.30 Min: 4.50
2	4 inches	39 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 6.00	Max: 7.30 Min: 4.50
3	39 inches	60 inches	stratified	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 6.00	Max: 7.30 Min: 4.50

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: sand
loamy fine sand
fine sand
sandy loam
fine sandy loam

Surficial Soil Types: sand
loamy fine sand
fine sand
sandy loam
fine sandy loam

Shallow Soil Types: sandy clay loam
sandy loam

Deeper Soil Types: fine sand
sand
loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS2352166	1/8 - 1/4 Mile SW
2	USGS2352154	1/4 - 1/2 Mile South
3	USGS2352149	1/4 - 1/2 Mile SSW
A5	USGS2352086	1/2 - 1 Mile North
A6	USGS2352085	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

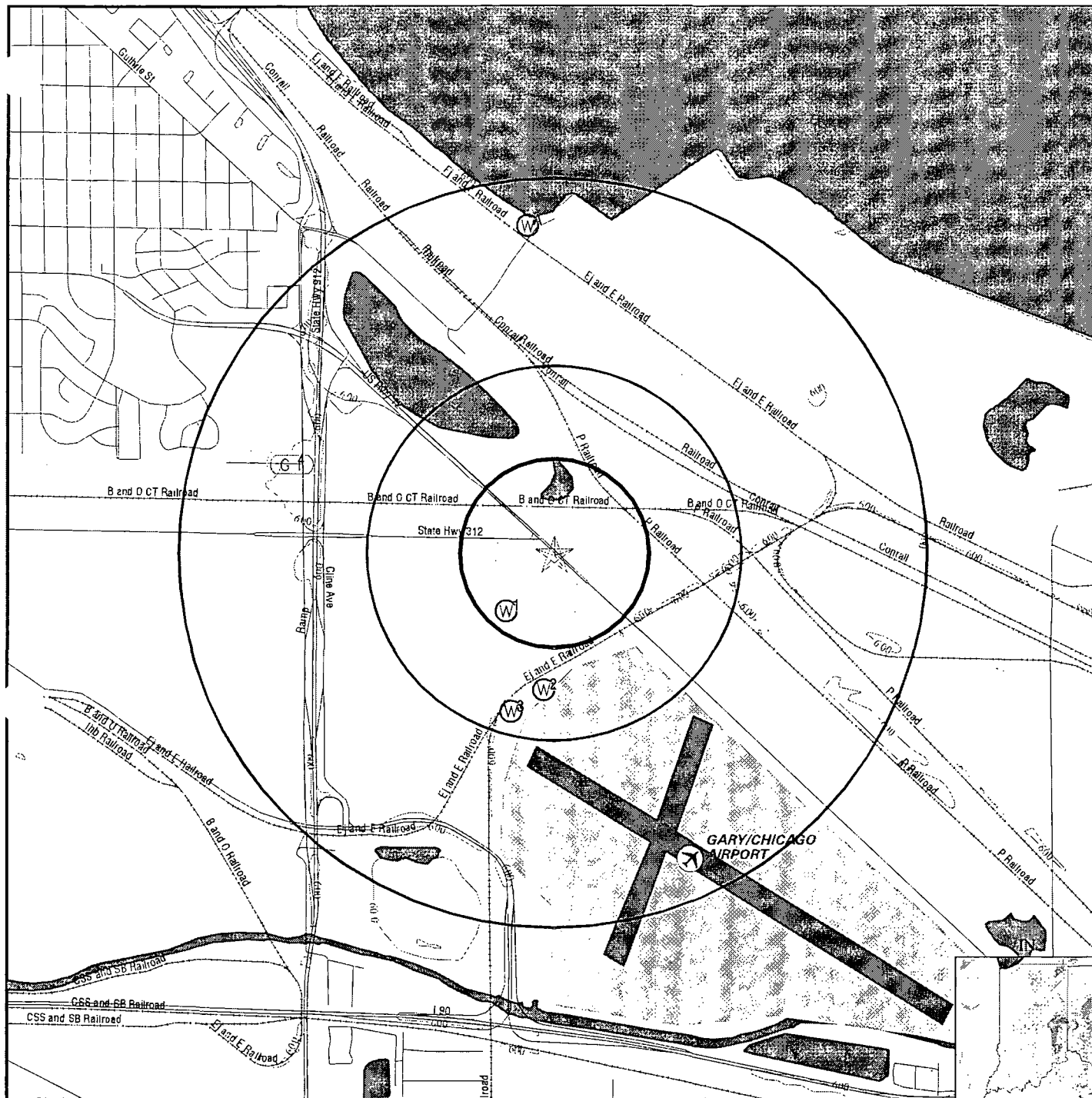
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 01940968.2r



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

SITE NAME: Conservation Chemical Company
 ADDRESS: 6500 Industrial Highway
 Gary IN 46406
 LAT/LONG: 41.6281 / 87.4198

CLIENT: QEPI
 CONTACT: Nivas Vijay
 INQUIRY #: 01940968.2r
 DATE: May 30, 2007 3:08 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1

SW
1/8 - 1/4 Mile
Higher

FED USGS USGS2352166

Agency cd:	USGS	Site no:	413733087252001
Site name:	WELL CGA-5 AT GARY AIRPORT, GARY, IN		
Latitude:	413733		
Longitude:	0872520	Dec lat:	41.62586917
Dec lon:	-87.42226258	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	18
State:	18	County:	089
Country:	US	Land net:	Not Reported
Location map:	WHITING IN 15A	Map scale:	24000
Altitude:	595.97		
Altitude method:	Level or other surveying method		
Altitude accuracy:	.01		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Little CalumetGalien. Illinois, Indiana, Michigan. Area = 705 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Unconfined single aquifer		
Aquifer:	LAKE DEPOSITS		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	441813900		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

2

South
1/4 - 1/2 Mile
Higher

FED USGS USGS2352154

Agency cd:	USGS	Site no:	413722087251301
Site name:	WELL CGA-3 (NORTH), W. BORDER AIRPORT, GARY, IN		
Latitude:	413722		
Longitude:	0872513	Dec lat:	41.62281363
Dec lon:	-87.42031804	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	18
State:	18	County:	089
Country:	US	Land net:	NENWNES35T37NR09W
Location map:	HIGHLAND 15C	Map scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Altitude: 590.07
 Altitude method: Level or other surveying method
 Altitude accuracy: .01
 Altitude datum: National Geodetic Vertical Datum of 1929
 Hydrologic: Little CalumetGalien. Illinois, Indiana, Michigan. Area = 705 sq.mi.
 Topographic: Not Reported
 Site type: Ground-water other than Spring Date construction: Not Reported
 Date inventoried: Not Reported Mean greenwich time offset: EST
 Local standard time flag: N
 Type of ground water site: Single well, other than collector or Ranney type
 Aquifer Type: Unconfined single aquifer
 Aquifer: LAKE DEPOSITS
 Well depth: 23.01 Hole depth: Not Reported
 Source of depth data: reporting agency (generally USGS)
 Project number: 441813900
 Real time data flag: 0 Daily flow data begin date: 0000-00-00
 Daily flow data end date: 0000-00-00 Daily flow data count: 0
 Peak flow data begin date: 0000-00-00 Peak flow data end date: 0000-00-00
 Peak flow data count: 0 Water quality data begin date: 0000-00-00
 Water quality data end date: 0000-00-00 Water quality data count: 0
 Ground water data begin date: 1985-10-24 Ground water data end date: 1999-03-02
 Ground water data count: 46

Ground-water levels, Number of Measurements: 46

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1999-03-02	5.55		1998-12-15	5.89	
1998-07-14	5.82		1997-12-11	5.81	
1997-06-26	5.53		1997-04-03	5.67	
1996-07-10	4.92		1996-03-26	4.74	
1995-11-28	5.64		1995-01-25	5.53	
1994-11-09	5.13		1993-09-09	4.37	
1993-06-09	3.95		1993-03-17	4.48	
1992-12-09	4.76		1992-09-09	5.03	
1992-06-24	4.98		1992-04-01	4.48	
1992-01-15	4.57		1991-10-17	5.11	
1991-07-10	4.81		1991-03-20	4.14	
1990-11-28	3.81		1990-09-20	4.61	
1990-02-27	4.38		1989-08-01	4.93	
1989-04-20	4.71		1989-01-26	4.82	
1988-10-11	5.44		1988-07-05	5.3	
1988-04-01	4.51		1987-08-04	5.36	
1987-02-27	5.03		1986-12-30	5.05	
1986-09-25	5.3		1986-08-19	5.37	
1986-08-04	5.34		1986-07-24	5.26	
1986-06-09	5.07		1986-05-09	5.27	
1986-03-31	5.09		1986-03-06	5.09	
1986-02-17	5.09		1986-02-03	5.19	
1985-12-05	4.92		1985-10-24	5.26	

3
 SSW
 1/4 - 1/2 Mile
 Higher

FED USGS USGS2352149

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd: USGS Site no: 413719087251901
 Site name: WELL CGA-4 SOUTH, W. PERIM RD, AIRPORT AT GARY, IN
 Latitude: 413719
 Longitude: 0872519 Dec lat: 41.62198029
 Dec lon: -87.42198473 Coord meth: M
 Coord acc: S Latlong datum: NAD27
 Dec latlong datum: NAD83 District: 18
 State: 18 County: 089
 Country: US Land net: SWNNWNE35T37NR09W
 Location map: HIGHLAND 15C Map scale: 24000
 Altitude: 591.29
 Altitude method: Level or other surveying method
 Altitude accuracy: .01
 Altitude datum: National Geodetic Vertical Datum of 1929
 Hydrologic: Little CalumetGalien. Illinois, Indiana, Michigan. Area = 705 sq.mi.
 Topographic: Not Reported
 Site type: Ground-water other than Spring Date construction: Not Reported
 Date inventoried: Not Reported Mean greenwich time offset: EST
 Local standard time flag: N
 Type of ground water site: Single well, other than collector or Ranney type
 Aquifer Type: Unconfined single aquifer
 Aquifer: LAKE DEPOSITS
 Well depth: 23.75 Hole depth: Not Reported
 Source of depth data: reporting agency (generally USGS)
 Project number: 441813900
 Real time data flag: 0
 Daily flow data begin date: 0000-00-00
 Daily flow data end date: 0000-00-00
 Peak flow data begin date: 0000-00-00
 Peak flow data end date: 0000-00-00
 Peak flow data count: 0
 Water quality data begin date: 0000-00-00
 Water quality data end date: 0000-00-00
 Water quality data count: 0
 Ground water data begin date: 1985-10-24
 Ground water data end date: 1999-08-31
 Ground water data count: 48

Ground-water levels, Number of Measurements: 48

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1999-08-31	7.22		1999-06-29	6.54	
1999-03-02	6.01		1998-12-15	6.40	
1998-03-24	5.88		1997-12-11	6.27	
1997-06-26	6.24		1997-04-03	6.14	
1996-07-10	6.29		1996-03-26	6.11	
1995-11-28	5.99		1995-01-25	5.70	
1994-11-09	5.38		1993-09-09	5.78	
1993-06-09	5.35		1993-03-17	5.52	
1992-12-09	6.21		1992-09-09	6.59	
1992-06-24	6.41		1992-04-01	5.88	
1992-01-15	6.0		1991-10-17	6.29	
1991-07-10	6.22		1991-03-20	5.5	
1990-11-28	5.1		1990-09-20	6.02	
1990-02-27	5.79		1989-08-01	6.35	
1989-04-20	6.09		1989-01-26	6.21	
1988-10-11	7.1		1988-07-05	6.72	
1988-04-01	5.88		1987-08-04	6.8	
1986-12-30	6.45		1986-09-25	6.95	
1986-08-19	6.99		1986-08-04	6.84	
1986-07-24	6.72		1986-06-09	6.51	
1986-05-09	6.85		1986-03-31	6.63	
1986-03-20	6.46		1986-03-06	6.57	

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1986-02-17	6.55		1986-02-03	6.78	
1985-12-05	6.46		1985-10-24	7.13	

4 WNW 1/2 - 1 Mile Higher	Site ID: 6259 Groundwater Flow: NOT REPORTED Water Table Depth: 4.0-6.0 Date: 12/01/91	AQUIFLOW 4165
--	---	----------------------

A5 North 1/2 - 1 Mile Higher	FED USGS USGS2352086
---	-----------------------------

Agency cd:	USGS	Site no:	413828087251302
Site name:	USGS WELL C4 @ BUFFINGTON HARBOR, E. CHICAGO IN		
Latitude:	413826.63		
Longitude:	0872516.08	Dec lat:	41.64076638
Dec lon:	-87.42117394	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	18
State:	18	County:	089
Country:	US	Land net:	NESWSES23T37NR9W
Location map:	WHITING IN 15A	Map scale:	24000
Altitude:	589.15		
Altitude method:	Level or other surveying method		
Altitude accuracy:	.01		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Little CalumetGalien. Illinois, Indiana, Michigan. Area = 705 sq.mi.		
Topographic:	Dunes		
Site type:	Ground-water other than Spring	Date construction:	19870617
Date inventoried:	19870617	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Unconfined single aquifer		
Aquifer:	DUNE DEPOSIT		
Well depth:	15.0	Hole depth:	15.00
Source of depth data:	driller		
Project number:	441810700		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1987-07-09
Water quality data end date:	1993-06-23	Water quality data count:	4
Ground water data begin date:	1987-06-24	Ground water data end date:	2004-10-27
Ground water data count:	54		

Ground-water levels, Number of Measurements: 54

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2004-10-27	9.30		2004-07-20	8.92	
2004-04-05	9.87		2004-01-07	10.23	
2003-07-09	9.88		2003-04-09	10.30	
2002-09-05	9.41		2002-07-10	8.64	

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2002-03-27	9.38		2001-12-11	9.60	
2001-09-05	9.31		2001-06-06	9.17	
2001-04-10	9.55		2001-02-27	9.30	
2000-08-29	9.31		2000-06-28	9.15	
2000-03-29	9.82		2000-01-05	9.75	
1999-09-01	9.01		1999-06-29	7.41	
1999-03-03	7.48		1998-12-16	8.01	
1998-09-08	6.69		1998-07-13	6.93	
1997-12-12	7.72		1997-06-25	7.40	
1997-04-02	7.80		1996-03-26	9.51	
1995-11-29	8.90		1995-01-19	8.81	
1994-11-09	8.06		1993-09-09	7.74	
1993-06-11	7.07		1993-03-17	8.29	
1992-09-10	8.92		1992-06-23	8.91	
1992-04-02	8.52		1992-01-17	8.69	
1991-10-17	9.07		1991-07-11	8.60	
1991-03-20	8.41		1990-11-28	9.22	
1990-09-19	8.46		1990-05-31	8.29	
1990-02-28	8.65		1989-08-01	8.38	
1989-04-18	8.54		1989-01-24	9.14	
1988-10-11	8.77		1988-07-05	8.57	
1988-03-31	8.28		1987-08-04	7.59	
1987-07-09	7.53		1987-06-24	7.28	

A6
North
1/2 - 1 Mile
Higher

FED USGS USGS2352085

Agency cd:	USGS	Site no:	413828087251301
Site name:	USGS WELL C3 @ BUFFINGTON HARBOR, E. CHICAGO, IN		
Latitude:	413826.63	Dec lat:	41.64076638
Longitude:	0872516.08	Coor meth:	M
Dec lon:	-87.42117394	Latlong datum:	NAD27
Coor accr:	S	District:	18
Dec latlong datum:	NAD83	County:	089
State:	18	Land net:	NESWSES23T37NR9W
Country:	US	Map scale:	24000
Location map:	WHITING IN 15A		
Altitude:	589.07		
Altitude method:	Level or other surveying method		
Altitude accuracy:	.01		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Little CalumetGalien. Illinois, Indiana, Michigan. Area = 705 sq.mi.		
Topographic:	Dunes		
Site type:	Ground-water other than Spring	Date construction:	19870617
Date inventoried:	19870617	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Unconfined single aquifer		
Aquifer:	DUNE DEPOSIT		
Well depth:	30.0	Hole depth:	30.00
Source of depth data:	driller		
Project number:	441810700		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Peak flow data count: 0
 Water quality data end date: 1993-06-23
 Ground water data begin date: 1987-06-24
 Ground water data count: 54

Water quality data begin date: 1987-07-09
 Water quality data count: 4
 Ground water data end date: 2004-10-27

Ground-water levels, Number of Measurements: 54

Date	Feet below Surface	Feet to Sealevel
2004-10-27	9.18	
2004-04-05	9.74	
2003-07-09	9.73	
2002-09-05	8.28	
2002-03-27	9.24	
2001-09-05	9.18	
2001-04-10	9.43	
2000-08-29	9.17	
2000-03-29	9.63	
1999-09-01	8.79	
1999-03-03	8.12	
1998-09-08	7.34	
1997-07-17	7.33	
1997-04-02	7.66	
1995-11-29	8.86	
1994-11-09	8.15	
1993-06-11	7.05	
1992-09-10	8.88	
1992-04-02	8.47	
1991-10-17	9.03	
1991-03-20	8.36	
1990-09-19	8.44	
1990-02-28	8.62	
1989-04-18	8.51	
1988-10-11	8.78	
1988-03-31	8.22	
1987-07-09	7.44	

Date	Feet below Surface	Feet to Sealevel
2004-07-20	8.76	
2004-01-07	10.07	
2003-04-09	10.17	
2002-07-10	8.50	
2001-12-11	9.45	
2001-06-06	9.03	
2001-02-27	9.16	
2000-06-28	8.89	
2000-01-05	9.53	
1999-06-29	8.03	
1998-12-16	8.66	
1998-07-13	7.55	
1997-06-25	7.26	
1996-03-26	9.45	
1995-01-19	8.79	
1993-09-09	7.68	
1993-03-17	8.25	
1992-06-23	8.85	
1992-01-17	8.67	
1991-07-11	8.55	
1990-11-28	9.21	
1990-05-31	8.26	
1989-08-01	8.35	
1989-01-24	8.99	
1988-07-05	8.51	
1987-08-04	7.50	
1987-06-24	7.20	

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: IN Radon

Radon Test Results

City	County	Zip	Result
VALPARAISO	PORTER	46406	5.699999809265137
VALPARAISO	PORTER	46406	3.799999952316284

Federal EPA Radon Zone for LAKE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 46406

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.500 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Public Water Supply Wells

Source: Department of Environmental Management

Telephone: 317-308-3323

Community and non-community drinking water wells.

OTHER STATE DATABASE INFORMATION

RADON

State Database: IN Radon

Source: Department of Health

Telephone: 317-233-7148

Radon Test Results

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

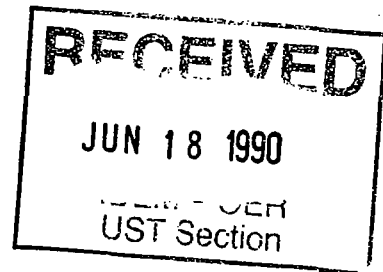
Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

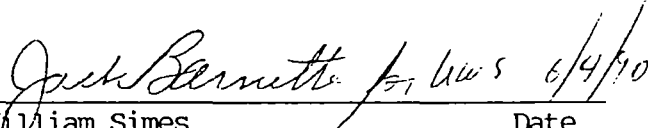
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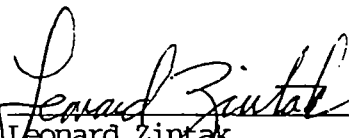
ON-SCENE COORDINATORS' REPORT
CERCLA REMOVAL ACTION
WESTERN SCRAP
GARY, INDIANA
SITE ID# 1L

Delivery Order Nos. 7460-05-117
6894-04-072

Removal Dates: May 18, 1986 - March 16, 1989



William Simes Date
On-Scene Coordinator



Leonard Zintak Date
On-Scene Coordinator

Emergency and Enforcement Response Branch
Office of Superfund
Waste Management Division
Region V
United States Environmental Protection Agency

EXECUTIVE SUMMARY

On May 13, 1986, the U.S. Environmental Protection Agency (U.S. EPA) initiated a removal action at the Western Scrap site in Gary, Indiana. The removal action was undertaken to mitigate threats to public health and environment posed by more than 300 drums, numerous pails and cans, and six tankers containing hazardous materials as defined by the Resource Conservation and Recovery Act (RCRA). The materials posed threats through the direct contact, fire and explosion, and inhalation and ingestion routes of exposure.

Under U.S. EPA guidance, the Emergency Response Cleanup Services (ERCS) contractor, PEI, subcontracted O.H. Materials to conduct the cleanup which consisted of sampling and staging soil, drums and pails, bulking and crushing drums and pails, removing contaminated soils, and transporting and disposing of all materials.

The removal was completed on March 16, 1989 at an estimated cost under control of the On-Scene Coordinators (OSCs) of \$340,461.27. The OSCs for this project were William Simes and Leonard Zintak.

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APPENDIX AA - Administrative Order
APPENDIX BB - Administrative Record Index
APPENDIX CC - Community Relations Plan
APPENDIX DD - TAT Site Inspection (Original: 8/85)

- * Portions of these OSC Report Appendices may contain confidential business or enforcement-sensitive information and must be reviewed by the Office of Regional Counsel prior to release to the public.

1.0 SUMMARY OF EVENTS

1.1 Initial Situation

The Western Scrap Site is part of an operating scrap yard located at 6500 Industrial Highway, Gary, Indiana. The site, which is approximately 20 acres in size, encompasses the location of the former Johnson Petroleum Refinery and more recently, the Berry Asphalt facility. The site is bounded by Conservation Chemical to the south, the Elgin, Joliet and Eastern Railroad to the east, Chicago Avenue to the west, and Industrial Highway to the north (Figure 1). The site is located in an industrial area with an unsecured entrance on Industrial Highway (Figure 2).

The property was owned by Total Leonard, which sold it in 1975 to Wayne Waggoner. The property was bought in 1979 by its present owner, Mrs. Constance Couloupoulos, a Boston, Massachusetts attorney. The land is rented to Western Scrap by verbal agreement.

The site contained approximately 300 drums, numerous pails and cans, and six tankers. This property is leased to the Western Scrap metal dealer as part of their scrap business. According to an employee from Western Scrap, the adjacent and formerly operational Conservation Chemical Company was responsible for depositing the drums on site.

1.2 Site History

On August 12 and 15, 1985, TAT representatives and a U.S. Environmental Protection Agency (U.S. EPA) On-Scene Coordinator (OSC) performed a site inspection of Western Scrap. The site assessment report documented the presence of approximately 300 55-gallon drums, six tankers, numerous pails and cans, and a metal shed containing numerous rusted 5-gallon pails. Pail labels indicated the contents to be printing ink. An area encompassing approximately 300 square feet, containing two large surface deposits of waste was also observed.

In September 1985, TAT assisted the OSC and U.S. EPA Emergency Response Team (ERT) with sampling activities at the Western Scrap site. Drums and tanks were sampled and analyzed for extraction procedure (EP) toxicity, ignitability, corrosivity, and reactivity characteristics. None of the drum and tank samples containing solids were found to be EP toxic for pesticides or heavy metals, and none of the drum and tank samples analyzed exhibited corrosive properties. Two drum samples analyzed for reactivity indicated the presence of cyanide when exposed to pH conditions between 2 and 12. Samples from drums with liquids exhibited flash points at ambient temperature (76°F). In addition, two other drum samples exhibited flash points less than the RCRA 140°F ignitability level.

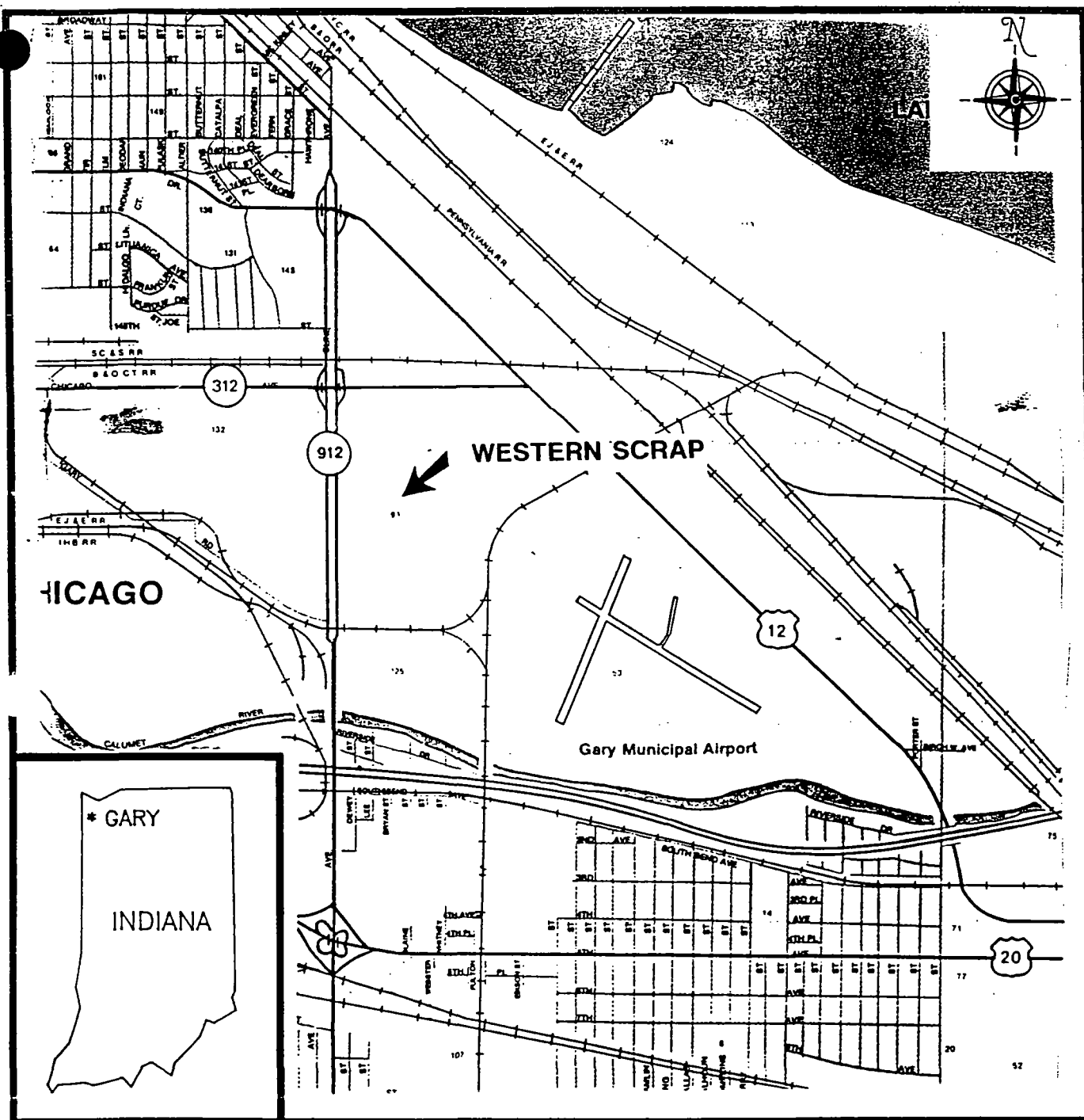
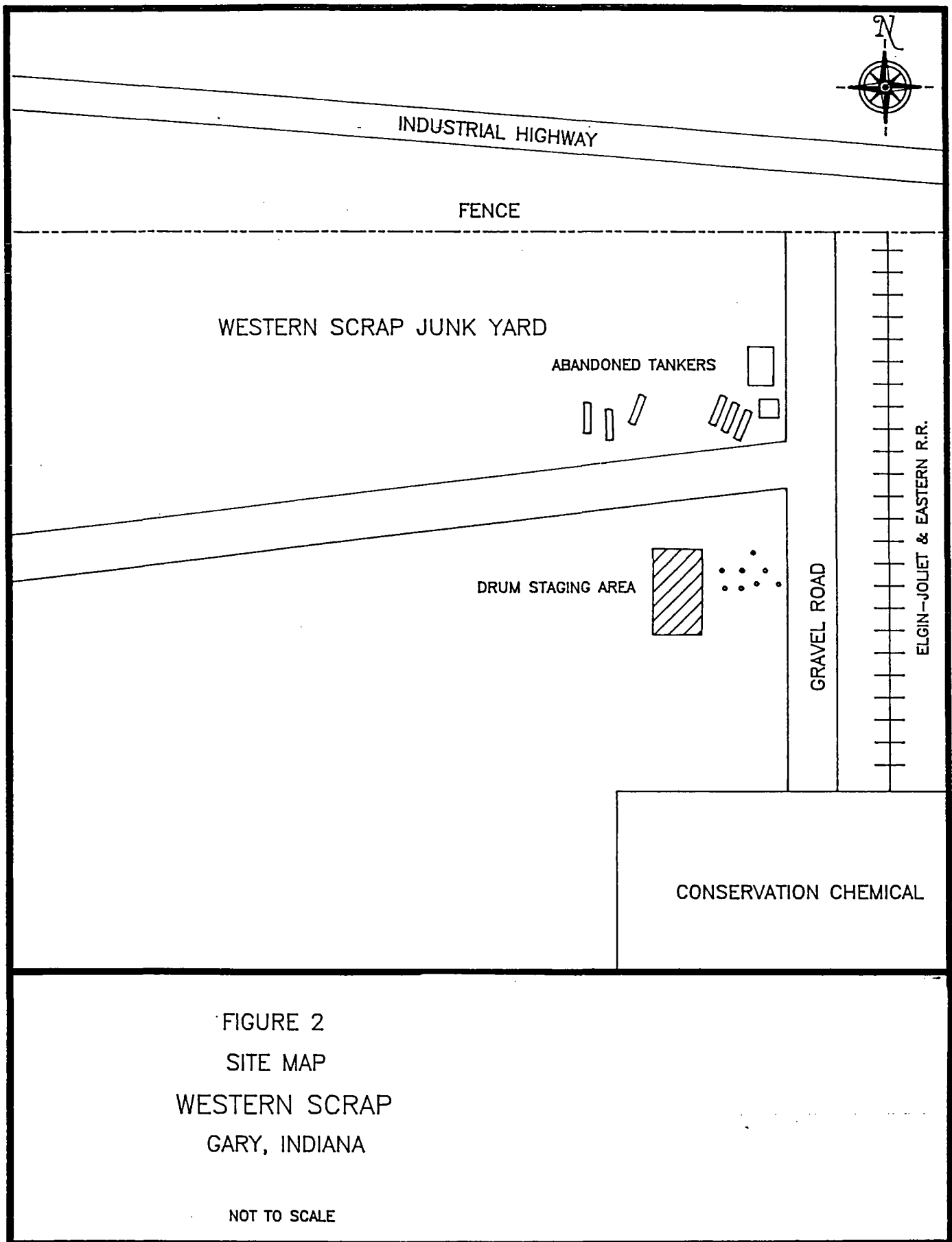


FIGURE 1
SITE LOCATION MAP
WESTERN SCRAP
GARY, INDIANA

SCALE: 1 INCH = 1 1/2 MILE



1.3 Threat to Public Health and the Environment

Based on the site investigation and the results of the analytical data, conditions at Western Scrap posed a threat to human health and the environment and warranted a removal action as outlined in Section 300.65(b)(2) of the National Contingency Plan (NCP). Specifically, the following conditions existed at Western Scrap:

- o Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or food chain;
- o Hazardous substances or pollutants or contaminants in drums, barrels, tanks or other bulk storage containers, that may pose a threat of release;
- o Threat of fire or explosion.

Section 300.65(b)(2)(i) of the NCP authorizes a removal action where "actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals or food chain" exists. At the Western Scrap site, the presence of drums containing PCBs, cyanide, sulfides, and solvents pose a substantial threat of immediate exposure to humans and animals via direct skin contact, inhalation or ingestion. PCBs are suspected human carcinogens. The site is unsecured, and hunters and motorcyclists have easy access to the wastes on site.

Section 300.65(b)(2)(iii) of the NCP authorizes a removal action where "hazardous substances or pollutants or contaminants in drums, barrels, tanks or other bulk storage containers, that may pose a threat of release" exist. The presence of toxic, flammable and corrosive liquids in degraded drums pose a threat of release of hazardous substances to the air and the surrounding soil at the site.

Section 300.65(b)(2)(vi) of the NCP authorizes a removal action where the "threat of fire or explosion" exists. Under 40 CFR Section 261.21, a waste is classified as a hazardous waste and poses a fire or explosion threat if it exhibits the characteristic of ignitibility. Many drums at the Western Scrap site contain flammable liquids with flashpoints of less than 140 degrees Fahrenheit and therefore exhibit the characteristic of ignitibility. A fire or explosion at the site could create an emergency situation.

Since access to the site is unrestricted, the potential also exists for direct contact with the drummed material.

1.4 Attempts to Obtain a PRP Response

On June 17, 1986, a Unilateral Section 106 Administrative Order was sent to the potentially responsible parties (PRPs) associated with the Western Scrap site. The Order was amended on June 30, 1986, and later September 12, 1986, to exclude PRPs who were no longer considered to be generators. At that time, there appeared to be seven PRPs associated with the site.

Owner - Mrs. Constance Coulopoulos, current owner of the property.

Operator - Mr. John Coule, operator of Western Scrap Corporation.

Generators - U.S. Polychemical Corporation
Franklin Maintenance Corporation
Conservation Chemical Company
American Lacquer Solvent Company
Norman B. Hjersted

The PRPs to date have not indicated any willingness to participate in the cleanup.

1.5 Actions Taken

On May 8, 1986, an Action Memorandum was signed by the Regional Administrator. On May 13, 1986, the U.S. EPA commenced a removal action at Western Scrap. The project ceiling for the removal action was \$226,200. Activities included sampling and staging of soil, drums and pails; consolidation of compatible materials; crushing of drums and pails; removal of contaminated soils; and arrangements for transportation and disposal of all material. Significant disposal delays were encountered in obtaining waste acceptance at Resource Conservation and Recovery Act (RCRA) compliant facilities. Recompositing of previously acquired samples was required to obtain waste acceptance at alternate disposal facilities which comply with the Superfund off-site policy. The removal action was coordinated by the Emergency Response Cleanup Services (ERCS) contractor, PEI, Inc. of Cincinnati, Ohio, under Delivery Order Nos. 7460-05-117 and 6894-04-072. PEI subcontracted O.H. Materials of Findlay, Ohio to conduct the clean-up action.

On August 15, 1988, a second Action Memorandum requesting a 12-month exemption and a \$70,000 project ceiling increase was approved to complete the site cleanup.

1.5.1 Compatibility Testing and Drum Sampling

Compatibility testing for waste stream assignment was performed by Aqualab and was completed in September 1986. Drum sampling for disposal acceptance was conducted by the TAT and ERCS contractors and was completed in August 1987. Transport of the wastes off site was initiated in December 1987.

1.5.2 Drum Overpacking and Disposal

During the removal and disposal phase of the cleanup, which commenced on December 14, 1987, many of the staged drums had deteriorated, and required overpacking. Following this overpacking activity, seven waste streams containing 115 drums were transported off site (Table 1).

Following the removal of these waste streams, 85 drums still remained on site for which disposal acceptance had not been obtained and compatibility testing had not been done. O.H. Materials sampled a 5-gallon pail from the shed, and the drums for compatibility and disposal acceptance, but due to time constraints (end of the calendar year) and freezing weather conditions, the removal was not completed, and the contractor demobilized on December 29, 1987.

1.5.3 Sampling of Additional Drums

On August 4 and 5, 1988, PEI remobilized to the site to sample 85 drums that were not addressed during the December 1987 phase of the removal. Because it was agreed that an error had been made, all sampling and site costs were non-billable for these two days.

1.5.4 Paint Can Overpacking and Drum Removal

On October 31 and November 1, 1988, O.H. Materials remobilized to the site to crush and overpack the 5-gallon paint/ink-containing cans, and remove the remaining waste streams. The paint cans were crushed and consolidated into overpack drums. Five additional waste streams in 33 overpack drums were transported to Adams Center Landfill and ThermalKem for disposal.

1.5.5 Rolloff Removal

On November 29, 1988, O.H. Materials remobilized to the site to load and dispose of two-25 cubic yard-rolloff boxes. Each rolloff box contained non-hazardous debris (crushed drums and PPE), and were disposed of at Adams Center Landfill.

1.5.6 Final Removal Activity

The TAT and OSC returned to the site on March 15, 1989 to oversee the removal of the final five drums remaining on site. While loading, the Metropolitan driver who would be transporting the drums, noted that two of the drums were either leaking or in poor physical condition. Subsequently, transport of the drums was delayed one day.

TABLE 1
HAZARDOUS WASTE MANIFESTED OFF SITE

<u>WASTE CATEGORY</u>	<u>QUANTITY</u>	<u>DATES REMOVED</u>	<u>DISPOSAL SITE</u>	<u>TRANSPORTER</u>
Non Regulated Waste	8350 lbs.	12/17/87	Adams Center Landfill Ft. Wayne, Indiana	SET Environmental
Waste Corrosive Liquid N.O.S. Corrosive Material UN1760	440 gal.	12/17/87	Chem Clear, Chicago, Illinois	SET Environmental
Non Hazardous Non Regulated	660 gal.	12/17/87	Chem Clear	SET Environmental
Hazardous Waste Solid N.O.S. ORM-E NA 9189	15 cyd.	12/17/87	SCA Chem Services Chicago, Illinois	SET Environmental
Waste Flammable Solid N.O.S. Flammable Solid UN 1325	30250 lbs.	12/18/87	ThermalKEM, Rock Hill, South Carolina	Metropolitan Environmental
Waste Flammable Liquid N.O.S. Flammable Liquid UN 1993	5500 gal.	12/18/87	ThermalKEM	Metropolitan Environmental
Waste Flammable Liquid N.O.S. Flammable Liquid UN 1993	23650 gal.	12/18/87	ThermalKEM	Metropolitan Environmental
Waste Flammable Liquid N.O.S. Flammable Liquid UN 1993	550 gal.	12/18/87	ThermalKEM	Metropolitan Environmental
Non Regulated Waste	3848 lbs.	12/18/87	Adams Center Landfill	SET Environmental
Waste Flammable Liquid N.O.S. Flammable Liquid UN 1993	12645 gal.	12/22/87	ThermalKEM	Metropolitan Environmental
RQ Waste Hazardous Subst. N.O.S., ORM-E (Polychloro- inated biphenyls) NA 9189	375 lbs.	12/29/87	National Electric Coffeyville, Kansas	SET Environmental
Non-Hazardous Waste Water	110 gal.	11/01/88	Chem Clear	SET Environmental

TABLE 1 (cont)

<u>WASTE CATEGORY</u>	<u>QUANTITY</u>	<u>DATES REMOVED</u>	<u>DISPOSAL SITE</u>	<u>TRANSPORTER</u>
Waste Flammable Liquid N.O.S. Flammable Liquid UN 1993	715 gal.	11/01/88	ThermalKEM	SET Environmental
Waste Flammable Solid N.O.S. Flammable Solid UN 1325	605 gal.	11/01/88	ThermalKEM	SET Environmental
Waste Corrosive Liquid N.O.S. Corrosive Liquid UN 1760	55 gal.	11/01/88	ThermalKEM	SET Environmental
Hazardous Waste Solid N.O.S. ORM-E NA 9188	1815 gal.	11/01/88	ThermalKEM	SET Environmental
Non-Hazardous Debris	25 cyd.	11/29/88	Adams Center Landfill	SET Environmental
Non-Hazardous Debris	32280 cyd.	11/29/88	Adams Center Landfill	SET Environmental
Waste Flammable Liquid N.O.S. Flammable Liquid UN 1993	5500 gal.	12/18/88	ThermalKEM	Metropolitan Environmental
Waste Flammable Liquid N.O.S. Flammable Liquid UN 1993	55 gal.	03/16/89	ThermalKEM	Metropolitan Environmental
Waste Flammable Solid N.O.S. Flammable Solid IN 1325	350 lbs.	03/16/89	ThermalKEM	Metropolitan Environmental
Hazardous Waste Solid N.O.s. ORM-E NA 9189	350 lbs.	03/16/89	ThermalKEM	Metropolitan Environmental
Hazardous Waste Liquid N.O.S. ORM-E NA 9189	110 gal.	03/16/89	ThermalKEM	Metropolitan Environmental

O.H. Materials was mobilized to the site on March 16, 1989, and re-overpacked the two drums. The five-drum load, containing four waste streams, was transported to ThermalKem.

1.5.7 Demobilization

At the conclusion of each removal action phase, all crew and equipment were demobilized. All on-site cleanup activities were completed on March 16, 1989, and all equipment was demobilized. Rented equipment was decontaminated and either returned to or retrieved by the rental companies.

1.5.8 State and Local Efforts to Clean Up the Site

Due to budgetary constraints, State and local agencies were unable to fund the cleanup activities; their efforts were limited to keeping abreast of the site's status via intermittent site visits.

1.6 Community Relations

The proximity of the site to industrial areas, the threat of release of hazardous material into the environment, and the fire risk posed by the site brought the site to local attention. In response to these problems, the U.S. EPA began a removal action at the site, increasing local interest in the site. OSCs Bill Simes and Len Zintak worked a great deal to maintain good communications with local officials and citizens. The U.S. EPA has initiated a formal community relations plan for the site which is ongoing.

1.7 Cost Summary

Although PEI was the prime ERCS contractor for the Western Scrap cleanup, all on-site activities with the exception of the non-billable sampling were subcontracted to OHM by PEI. Site activities commenced on May 16, 1986 (Contract #68-01-6894, D.O. #6895-05-072) and concluded on March 16, 1989. During this period, a second action memorandum was approved and an additional delivery order issued (Contract #68-01-7460, D.O. #7460-05-117). As of June 9, 1989, total expenditures submitted by O.H. Materials totalled \$262,090.07. In addition, costs were incurred by the TAT (TDD#s 5-8605-13, 5-8610-38, 5-8612-30, 5-8701-11, 5-8702-09, 5-8702-09A, 5-8810-08) and U.S. EPA (Table 2). Total removal costs are estimated at \$340,461.27.

Any indication of specific costs incurred at the site is only an approximation, subject to audit and final definitization by the U.S. EPA. The OSC report is not meant to be a final reconciliation of the costs associated with a particular site.

TABLE 2

SUMMARY OF TOTAL REMOVAL COSTS*
WESTERN SCRAP, GARY, INDIANA

MAY 13, 1986 - MARCH 16, 1989

<u>Organization</u>	<u>Amount</u>
ERCS Contractor ¹	\$262,090.07
EPA Costs ²	
Direct	9,699.24
Indirect	25,571.30
TAT Costs ³	<u>43,100.66</u>
 TOTAL	 \$340,461.27

1 Based on estimated costs from U.S. EPA forms 1900-55.

2 Based on Superfund Financial Management Cumulative Cost Summary prepared 12/11/89.

3 TAT costs (TDD#s 5-8605-13; 5-8610-38; 5-8612-30; 5-8701-11; 5-8702-09; 5-8702-09A; 5-5-8810-08) given by the TAT through 4/27/90.

* Any indication of specific costs incurred at the site is only an approximation, subject to audit and final definitization by the U.S. EPA. The OSC Report is not meant to be a final reconciliation of the costs associated with a particular site.

2.0 EFFECTIVENESS OF REMOVAL ACTION

2.1 Responsible Parties

A Unilateral Section 106 Administrative Order was sent to the PRPs, who were unwilling to participate in the cleanup. Subsequently, the U.S. EPA performed all clean-up activities and will be taking action to recover costs incurred during the site cleanup.

2.2 State and Local Agencies

As presented in Section 1.5.8, State and local officials were unable to fund a site cleanup due to budgetary constraints. Their involvement with the site cleanup was limited to intermittent site visits in order to keep abreast of the site's status.

2.3 Federal Agencies

The U.S. EPA provided all monetary resources for the removal action at the Western Scrap site. Under direct guidance of the OSC, the cleanup effectively removed existing environmental and public health threats posed by the site.

3.0 PROBLEMS ENCOUNTERED

3.1 Extreme Weather Conditions

Extremely cold temperatures were encountered during the December 1987 phase of the cleanup. Due to the cold weather, frozen drum contents had to be heated and thawed so samples could be collected. A temporary wood and visqueen shed was erected, the frozen drums were placed inside, and heat was applied. Once thawed, drums were sampled.

3.2 Damaged Overpacks

Two damaged overpacks were discovered during the final phase of the removal which occurred March 15 and 16, 1989, rendering them untransportable. Shipment of the entire load was delayed one day so O.H. Materials could be mobilized to the site to re-overpack the drums.

4.0 OSC RECOMMENDATIONS

Removal of hazardous materials effectively mitigated threats to human health and the environment posed by hazardous materials at the site.

Since freezing weather conditions complicated and delayed sampling of drums at the site, the OSC recommends that sampling not be conducted at freezing temperatures, time permitting.

CERCLIS EXECUTIVE SUMMARY

EPA ID# IND095258075

WINDSHIELD SURVEY YES X NO

Original Company Name: Western Scrap Corporation

Revised Company Name: _____

Alias Names: _____

Original X Address: 6901 W. Chicago
Corrected _____ Gary, IN 46406
Lake _____ County

____ Landfill _____ Generator _____ Treatment, Storage, Disposal (TSD)
____ Transporter X Other: Salvage

PRIORITY ASSESSMENT: _____ HIGH _____ MEDIUM _____ LOW X NO FURTHER ACTION (NONE)

CLASS:
____ I-STATE LEAD _____ II-REM/FIT LEAD _____ III-REM/FIT LEAD X IV OTHER:
____ State Accompanies _____ Limited On-site _____ None
____ FIT _____ State Involvement _____

=====

Priority Justification and State Comments Regarding:

X PA _____ SI _____ Follow-up SI _____ RPS _____ HRS

According to Lin Zintach U.S. EPA Emergency Response Region V, approximately 100 drums of paint waste and solvents have been stored on the Western Scrap Corporation property.

EPA is currently in the process of removing the drums, to an approved disposal area. The clean-up should be completed by July 1987.

At this time, the State is recommending no further action pending proper cleanup of hazardous wastes.

STATE INVOLVEMENT -

C Preliminary Assessments _____ Site Inspection _____ follow-up Site Inspection
_____ Responsible Party Search _____ Hazard Ranking System (HRS)

* COMPLETE DOCUMENTS (C) REVIEW DOCUMENTS (R)

Prepared by: Alan Freed AE Phone: 317/232-8931 Date: 5/29/87
Activity Time: 20 Hours



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IN 095258075

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Western Scrap Corporation		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 6901 W. Chicago			
03 CITY Gary	04 STATE IN	05 ZIP CODE 46406	06 COUNTY Lake	07 COUNTY CODE 089	08 CONG DIST 01
09 COORDINATES LATITUDE 41° 37' 40" N		LONGITUDE 087° 25' 10" W		Whiting Ind. Quad	

10 DIRECTIONS TO SITE (Starting from nearest public road)

Location is directly north of the Gary Airport on the corner of Hwy 12 and Chicago Avenue.

III. RESPONSIBLE PARTIES

01 OWNER (If known) Peter Coules		02 STREET (Business, mailing, residential) same			
03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER (219) 944-9749		
07 OPERATOR (If known and different from owner) same		08 STREET (Business, mailing, residential)			
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER ()		

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: ____/____/____ MONTH DAY YEAR ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ____/____/____ MONTH DAY YEAR ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE ____/____/86 MONTH DAY YEAR <input type="checkbox"/> NO		BY (Check all that apply) <input checked="" type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION BEGINNING YEAR _____ ENDING YEAR _____ <input checked="" type="checkbox"/> UNKNOWN			

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Paint waste, solvents Toxic/volatile

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Groundwater > Environment
Direct Contact > Population

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☒ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT Harry Atkinson 10.6/8		02 OF (Agency/Organization) Ind. Dept. of Env. Mgmt		03 TELEPHONE NUMBER (317) 232-8927	
04 PERSON RESPONSIBLE FOR ASSESSMENT Alan Freed AF		05 AGENCY IDEM	06 ORGANIZATION SHWM	07 TELEPHONE NUMBER (317) 232-8931	08 DATE 4 / 27 / 87 MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IN 095258075

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Western Scrap Corporation		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 6901 W. Chicago			
03 CITY Gary	04 STATE IN	05 ZIP CODE 46406	06 COUNTY Lake	07 COUNTY CODE 089	08 CONG DIST 01
09 COORDINATES LATITUDE 41° 37' 40" N		LONGITUDE 087° 25' 10" W		Whiting Ind. Quad	
10 DIRECTIONS TO SITE (Starting from nearest public road) Location is directly north of the Gary Airport on the corner of Hwy 12 and Chicago Avenue.					

III. RESPONSIBLE PARTIES

01 OWNER (If known) Peter Coules		02 STREET (Business, mailing, residential) same			
03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER (219) 944-9749		
07 OPERATOR (If known and different from owner) same		08 STREET (Business, mailing, residential)			
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER ()		
13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN					
14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) <input type="checkbox"/> A. RCRA 3001 DATE RECEIVED: ____/____/____ MONTH DAY YEAR <input type="checkbox"/> B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ____/____/____ MONTH DAY YEAR <input checked="" type="checkbox"/> C. NONE					

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE ____/____/86 MONTH DAY YEAR <input type="checkbox"/> NO		BY (Check all that apply) <input checked="" type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION BEGINNING YEAR _____ ENDING YEAR _____ <input checked="" type="checkbox"/> UNKNOWN			

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Paint waste, solvents Toxic/volatile

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Groundwater > Environment
Direct Contact > Population

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☒ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT Harry Atkinson JA. 6/18	02 OF (Agency/Organization) Ind. Dept. of Env. Mgmt		03 TELEPHONE NUMBER (317) 232-8927	
04 PERSON RESPONSIBLE FOR ASSESSMENT Alan Freed AF	05 AGENCY IDEM	06 ORGANIZATION SHWM	07 TELEPHONE NUMBER (317) 232-8931	08 DATE 4, 27, 87 MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE

02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ E. DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: _____
(Acres)

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ H. WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ I. POPULATION EXPOSURE/INJURY

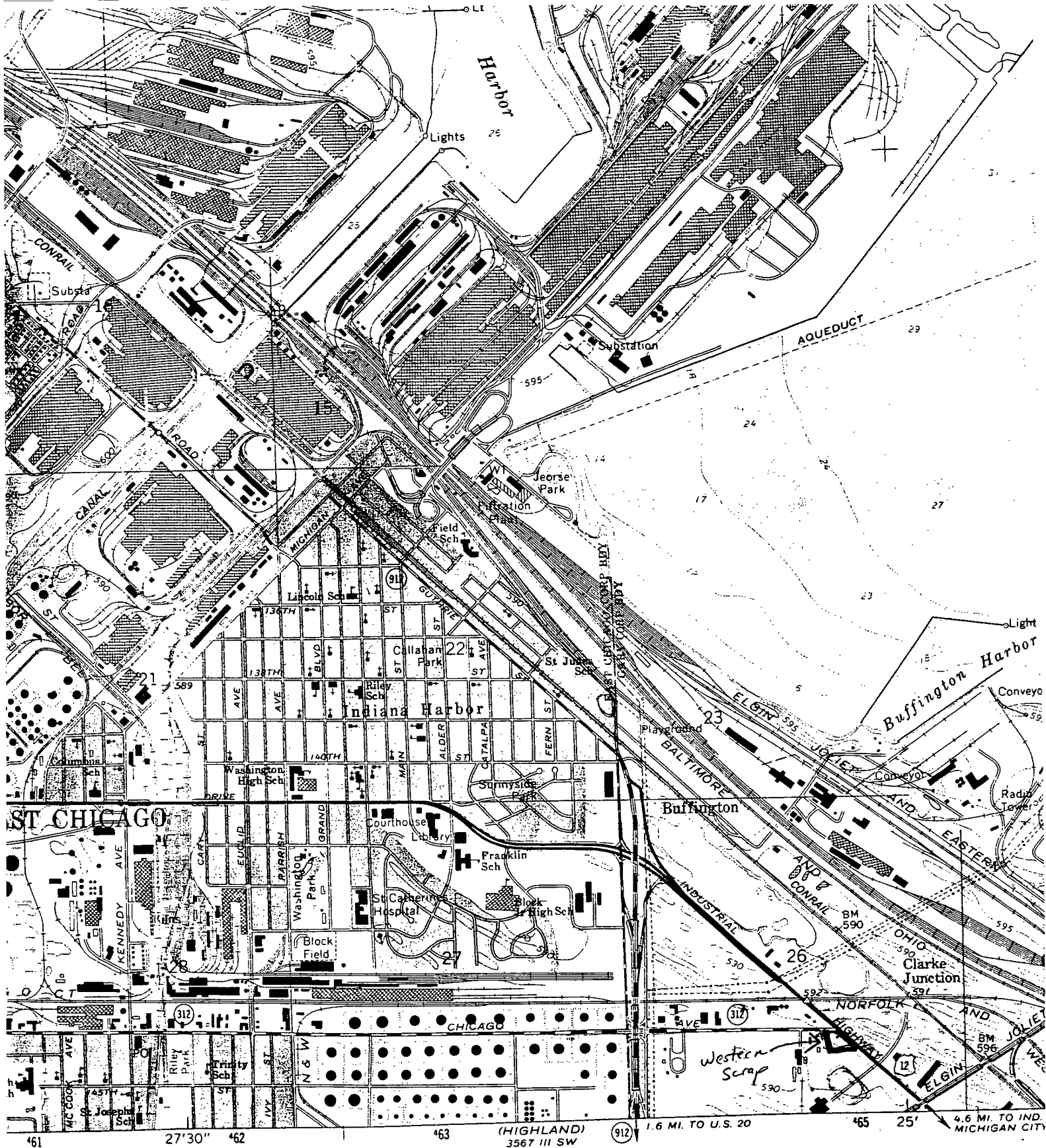
03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED



SCALE 1:24 000

CONTOUR INTERVAL 5 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS LOW WATER 578.5 FEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092

GRID AND 1980 MAGNETIC NORTH
ANOMALY AT CENTER OF SHEET

QUADRANGL



Adams Center Sanitary Landfill, Inc.
4636 Adams Center Road
Fort Wayne, Indiana 46806
219/447-5585

611

OCT 27 11 38 AM '88

OFFICE OF SOLID
AND HAZARDOUS
WASTE MGMT
DEM

October 25, 1988

State of Indiana
Department of Environmental Management
105 S. Meridian Street
Indianapolis, IN 46225
Attn: George Oliver

Dear Mr. Oliver:

This letter serves as notification to dispose of the referenced non-RCRA waste in the RCRA portion of the Adams Center Sanitary Landfill in Fort Wayne, Indiana, in accordance with the Indiana Department of Environmental Management Special (non-RCRA) waste permit.

Disposal approval for the described material will be granted on the 10th working day from your receipt of this letter, unless Adams Center is notified in advance of a denial under condition 5 or 6 of the Special Waste Permit. This approval will expire one year from the date of approval.

Attached is a Chemical Waste Management, Inc. profile sheet and corresponding analytical data for the following request information:

GENERATOR NAME: USEPA/Western Scrap
FACILITY ADDRESS: 6500 Industrial Hwy-Gary, IN 46406
TECHNICAL CONTACT: Len Zintak
PHONE NUMBER: 312/886-4246
WASTE NAME: Contaminated soil
PROFILE NUMBER: ACL J09445
ANNUAL VOLUME: 40 yards
RECERTIFICATION: OR NEW PERMIT: X

Should you have questions concerning this notification, please contact the Customer Service Department at (219) 447-5585.

Respectfully,

Deborah L. Muench

Deborah L. Muench
Customer Service Representative

cc: file
sales-153
DCS
Nancy Bittner

Date Rec'd 10/27/88
Date Approved _____
Date Expires 11/14/88
Letter Reference No. 611



SPECIAL WASTE ANALYSIS REPORT



LOCATION OF ORIGINAL
CWM of IN, Inc.

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.

ACL J09445
Waste Profile Sheet Code
FROM SAMPLE CONTAINER

LABORATORY NAME: CHEMICAL WASTE MANAGEMENT OF INDIANA, INC. Adams Center Laboratory
ADDRESS: 4636 Adams Center Road, Fort Wayne, Indiana 46806 LAB MGR. PHONE: (219) 447-5585
DATE SAMPLE RECEIVED AT LAB: 10/4/88 DATE SAME TAKEN: _____
LAB SAMPLE NUMBER ASSIGNED: 10048-01 CERTIFICATION OF REP. SAMPLE OBTAINED? ☐ YES ☐ NO
CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision. For Chemical Waste Management, Inc. companies, sample preparation and analytical methods and analytical equipment specified or approved in the facility's waste analysis plan were used in conducting this analysis. This laboratory follows a quality assurance control program.
DATE OF REPORT: 10/12/88 SIGNATURE: [Signature]
LAB MANAGER NAME: John D. Van Vleet

PHYSICAL CHARACTERISTICS OF WASTE					
SAMPLE VOLUME	COLOR	DOES THE WASTE HAVE A STRONG INCIDENTAL ODOR?	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
1000 cc's	Brown Soil	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF KNOWN, DESCRIBE _____	<input checked="" type="checkbox"/> SOLID <input type="checkbox"/> SEMI-SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> POWDER	<input type="checkbox"/> MULTILAYERED <input type="checkbox"/> BI-LAYERED <input checked="" type="checkbox"/> SINGLE PHASED	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO VOLUME: _____ %

✓	Test	As Received	Extraction Procedure	Date of Analysis	✓	Test	As Received	Extraction Procedure	Date of Analysis
	Specific Gravity					Sulfur, as S, %			
	PH, s.u. 10% by Volume	6.6		10-11-88 [Signature]		Phenols, mg/l			
	Acidity, %, as					Cyanides, as CN, Total mg/l			
	Alkalinity, %, as					Cyanides, as CN, Free mg/l			
	C.O.D., mg/l					Ammonia Nitrogen, as N, mg/l			
	B.O.D., mg/l					Total Kjeldahl Nitrogen, as N, mg/l			
	Total Solids @ 105°C, %	299.5		10-7-88 [Signature]		Total Alkalinity, P, as CaCO ₃ , mg/l			
	Total Dissolved Solids, mg/l					Total Alkalinity, M, as CaCO ₃ , mg/l			
	R.O.E. @ 180°C, mg/l					Total Hardness, as CaCO ₃ , mg/l			
	Bulk Density (g/cc)	1.07		10-11-88 [Signature]		Calcium Hardness, as CaCO ₃ , mg/l			
	Flash Point, °F (closed cup)					Magnesium Hardness, as CaCO ₃ , mg/l			
	Ash Content, on ignition, %	89.4		10-7-88 [Signature]		Oil and Grease, mg/l			
	Heating Value, BTU/lb					Paint Filter Test, Pass/Fail	PASS		10-11-88 [Signature]
	Arsenic, as As, mg/l					Water Content, as H ₂ O, %			
	Barium, as Ba, mg/l					Aldrin, mg/l			
	Cadmium, as Cd, mg/l					Chlordane, mg/l			
	Chromium, Total, as Cr, mg/l					DDT, mg/l			
	Chromium, Hexavalent, as Cr ⁶⁺ , mg/l					Dieldrin, mg/l			
	Cobalt, as Co, mg/l					Heptachlor, mg/l			
	Copper, as Cu, mg/l					Parathion, mg/l			
	Iron, Total, as Fe, mg/l					Endrin, mg/l			
	Iron, Dissolved, as Fe, mg/l					Lindane, mg/l			
	Lead, as Pb, mg/l					Methoxychlor, mg/l			
	Manganese, as Mn, mg/l					Toxaphene, mg/l			
	Magnesium, as Mg, mg/l					2,4-D, mg/l			
	Mercury, as Hg, mg/l					2,4,5-TP (Silvex), mg/l			
	Nickel, as Ni, mg/l					PCBs, mg/l			
	Selenium, as Se, mg/l					pH Screen, s.u. 10% paper			
	Silver, as Ag, mg/l					Cyanide Screen, Pos/Neg	NEG		
	Thallium, as Tl, mg/l					Flammability Screen, Pos/Neg	NEG		
	Zinc, as Zn, mg/l					Oxidizer Screen, (+/-)			
	Bicarbonates, as HCO ₃ , mg/l					Radiation Screen, Pos/Bkg	✓ BKG		
	Bromides, as Br, mg/l					Sulfide Screen, Pos/Neg	NEG		
	Carbonates, as CO ₃ , mg/l					Water Mix Screen, WSDL SIF			
	Chlorides, as Cl, mg/l					Penetrometer (tn/ft ²)	0.23		
	Fluorides, as F, mg/l								
	Nitrates, as NO ₃ , mg/l								
	Nitrites, as NO ₂ , mg/l								
	Phosphates, as P, mg/l								
	Sulfates, as SO ₄ , mg/l								
	Sulfides, as S, mg/l								

SUBURBAN LABORATORIES, Inc.

4140 LITT DRIVE

HILLSDALE, ILLINOIS 60162 - 1183

EARL I. ROSENBERG
PresidentH.R. THOMAS, JR.
Director

January 18, 1988

RECEIVED
JAN 21 1988PEI Associates, Inc.
11499 Chester Road
Cincinnati Ohio 45246

PEI ASSOCIATES, INC.

Attn: Mr. Paul Kefauver

By _____

Re: P.O. #3189-1072
O.H. Materials Corp.
Project #3828-P30Sample Received: 1/4/88

Source: S/L #8-0068 - Sample #3828-86, Composite Soil, PD/EM 1300

	<u>Raw</u>		<u>E. P. Toxicity (mg/l)</u>
pH (1:3 dilution) at 20°C	7.8	(+)Arsenic	0.031
Cyanide, Total (ppm)	1.96	Barium	< 1.0
Phenols (ppm)	0.2	Cadmium	< 0.10
Sulfide, Total (ppm)	1.5	Chromium, Total	< 0.10
Ash (%)	69.5	Lead	< 0.10
Specific Gravity	1.51	Mercury	0.0006
Total Solids (%)	80.47	(+)Selenium	< 0.001
Water (%)	19.58	Silver	< 0.10
Flash Point	> 212°F	(+) by HGA	
PCB's (ppm)	< 0.1	(< = <u>less than</u>)	

ANALYSIS CERTIFIED BY:  , Director (HRT/ak)Members of American Society of Mass Spectrometry
American Chemical Society • American Society for Microbiology
Water Pollution Control Federation • Institute of Food TechnologyCertifications: U.S.D.A. #1783 • Ill. Dept. of Public Health #17135 • Amer. Spice Trade Assn. • F.D.A. Reg. #1419676 • Ill. EPA #100225
Wis. DNR #999318210

Custody Seal #s: 6650
6051

CHAIN OF CUSTODY RECORD

PROJECT NAME Western Soap		PROJECT NO.		SAMPLERS: (Signature) Charles Curn		STATION LOCATION S-16479		NO. OF CONTAINERS 1-32oz		REMARKS Disposed EPA tag #:	
DATE 8/4/88		TIME 1400		COMP. X		GRAB X		DATE 8/4/88		TIME 1400	
Relinquished by: (Signature) Charles Curn		Date / Time 9/20/88 1300		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)		Date / Time		Remarks To be completed by CUM Atkins Co.		Laboratory File	



PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).



ACL

J 09445

Waste Profile Sheet Code 153

CWM Location of Original: ACC

(SHADED AREAS FOR CWM USE ONLY)

CWM Sales Rep. #:

A. GENERAL INFORMATION

1. Generator Name: U.S. EPA / Western Scrap 2. Generator USEPA ID: INE2000 00239
3. Facility Address: 6500 Industrial Highway 4. Generator State ID: _____
Gary, Indiana 46406
5. Zip Code: 46406
6. Technical Contact: Len Zintak 7. Title: On-Scene Coordinator 8. Phone: (312) 586-4346

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO 1. ☐ Generating Facility (A, above), or
2. Company Name: PEI Associates 3. Phone: (513) 782 - 4700
4. Address: 11499 Chester Rd.
Cincinnati, Ohio
5. Zip Code: 45246

C. 1. NAME OF WASTE

C. 1. NAME OF WASTE Contaminated Soil
 2. PROCESS GENERATING WASTE CERCLA Cleanup - abandoned drums at a scrap metal dealer
 3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☒ No If yes, DO NOT COMPLETE this form. Contact your Chemical Waste Management, Inc. sales representative for assistance.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color: <u>own</u>	2. Does the waste have a strong incidental odor? <input type="checkbox"/> No <input type="checkbox"/> Yes If known, describe: <u>NA</u>	3. Physical State @ 70°F: <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Semi-Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Powder Other: _____	4. Layers: <input type="checkbox"/> Multilayered <input type="checkbox"/> Bi-layered <input checked="" type="checkbox"/> Single Phased	5. Specific Gravity: Range: <u>1.5</u> 1.5	6. Free Liquids: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Volume: _____ %
7. pH: <input type="checkbox"/> ≤ 2 <input type="checkbox"/> > 2-4 <input type="checkbox"/> 4-7 <input type="checkbox"/> 7 <input checked="" type="checkbox"/> 7-10 <input type="checkbox"/> 10- < 12.5 <input type="checkbox"/> ≥ 12.5 <input type="checkbox"/> Range <u>6-8</u> <input type="checkbox"/> NA					

8. Liquid Flash Point: ☐ < 73°F ☐ 73-99°F ☐ 100-139°F ☐ 140-199°F ☒ ≥ 200°F ☐ None ☒ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION

[illegible]

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. **TOTAL:** 120 %

2 Indicate if this waste contains any of the following:

	NONE	or	LESS THAN	or	ACTUAL	
PCB's	<input type="checkbox"/>		<input type="checkbox"/> < 50 ppm		<u>< 0.1</u>	ppm
Cyanides	<input type="checkbox"/>		<input type="checkbox"/> < 50 ppm		<u>1.96</u>	ppm
Phenolics	<input type="checkbox"/>		<input type="checkbox"/> < 50 ppm		<u>0.2</u>	ppm
Sulfides	<input type="checkbox"/>		<input type="checkbox"/> < 50 ppm		<u>1.5</u>	ppm

F. METALS Indicate if this waste contains any of the following:

1. <input checked="" type="checkbox"/> EP TOX/TCLP		or	2. <input type="checkbox"/> Total	
METAL	LESS THAN	or	ACTUAL	
(Parts Per Million)				
Arsenic	<input type="checkbox"/> < 5	<input type="checkbox"/> < 500		<u>0.031</u>
Barium	<input type="checkbox"/> < 100			<u><1.0</u>
Cadmium	<input type="checkbox"/> < 1	<input type="checkbox"/> < 100		<u><0.10</u>
Chromium	<input type="checkbox"/> < 5			<u><0.10</u>
Lead	<input type="checkbox"/> < 5	<input type="checkbox"/> < 500		<u><0.10</u>
Mercury	<input type="checkbox"/> < 0.2	<input type="checkbox"/> < 20		<u>0.0006</u>
Selenium	<input type="checkbox"/> < 1	<input type="checkbox"/> < 100		<u><0.001</u>
Silver	<input type="checkbox"/> < 5			<u><0.10</u>
Chromium-Hex	<input type="checkbox"/> < 5	<input type="checkbox"/> < 500		<u>NA</u>
Copper	<input type="checkbox"/> < 5			<u>NA</u>
Nickel	<input type="checkbox"/> < 5	<input type="checkbox"/> < 134		<u>NA</u>
Thallium	<input type="checkbox"/> < 5	<input type="checkbox"/> < 130		<u>NA</u>
Zinc	<input type="checkbox"/> < 5			<u>NA</u>

GENERATOR'S WASTE MATERIAL PROFILE SHEET (Continued)

ACL J 09445
Waste Profile Sheet Code

G. OTHER HAZARDOUS CHARACTERISTICS

- Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☒ No
- Does this waste contain greater than 1000 ppm total halogenated organic compounds? ☐ Yes ☒ No
- Indicate if this waste is any of the following:

<input type="checkbox"/> RCRA Reactive	<input type="checkbox"/> Radioactive
<input type="checkbox"/> Water Reactive	<input type="checkbox"/> Etiological
<input type="checkbox"/> Explosive	<input type="checkbox"/> Pesticide Manufacturing Waste
<input type="checkbox"/> Shock Sensitive	<input type="checkbox"/> Other _____
<input type="checkbox"/> Pyrophoric	<input checked="" type="checkbox"/> None of the above

H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION

	LESS THAN	or	ACTUAL
Beryllium	<input type="checkbox"/> < 5000 ppm		_____ ppm
Potassium	<input type="checkbox"/> < 5000 ppm		_____ ppm
Sodium	<input type="checkbox"/> < 5000 ppm		_____ ppm
Total Bromine	<input type="checkbox"/> < 2 %		_____ %
Total Chlorine	<input type="checkbox"/> < 35 %		_____ %
Total Fluorine	<input type="checkbox"/> < 1 %		_____ %
Total Sulfur			_____ %

I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS Provide if information is available.

- Range
- Heat Value (BTU/lb): _____
 - Water: 19.58 %
 - Viscosity (cps): _____ @ ☐ _____ °F ☐ 100°F ☐ 150°F
 - Ash: 69.5 %
 - Settleable solids: _____ %
 - Vapor Pressure @ STP (mm/Hg): _____
 - Is this waste a pumpable liquid? ☐ Yes ☒ No
Type of pump? _____
 - Can this waste be heated to improve flow? ☐ Yes ☒ No
 - Is this waste soluble in water? ☐ Yes ☐ No
 - Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☐ Yes ☐ No

J. TRANSPORTATION INFORMATION

- Is this a DOT Hazardous Material? ☐ Yes ☒ No
- Anticipated Annual Volume/Units: 40 cubic yds.
- Proper Shipping Name: DOT Non-HAZARDOUS
- Hazard Class: NA
- I.D. #: NA
- Additional Description: (N/A)
- Method of Shipment: ☐ Bulk Liquid ☒ Bulk Solid ☐ Drum (Type/Size): _____ Other: _____
- CERCLA Reportable Quantity (RQ): NA
- RQ Units (lb/kg): NA
- USEPA Hazardous Waste? ☐ Yes ☒ No
- USEPA Hazardous Waste Number(s): NA
- State Hazardous Waste? ☐ Yes ☒ No
- State Hazardous Waste Number(s): NA

K. SPECIAL HANDLING INFORMATION

Super Bul Kithaven 10-24-88 DLM

☐ Additional Page(s) Attached

L. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. <u>Leonard N. Zintak Jr.</u> Signature	2. <u>On Scene Coordinator</u> Title
3. <u>Leonard N. Zintak Jr.</u> Name (Type or Print)	4. <u>7/12/88</u> Date



Chemical Waste Management, Inc.
GENERATOR CERTIFICATION OF REPRESENTATIVE SAMPLE
PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).



ACL

J 09445

CWM Location of Original: ACL

(SHADED AREAS FOR CWM USE ONLY)

Waste Profile Sheet Code 153
CWM Sales Rep. #: HT

Chemical Waste Management, Inc. must be returned, with the representative sample, to:

4636 Adams Center Road
Fort Wayne, Indiana 46806
219/447-5585

4636 Adams Center Road
Fort Wayne, Indiana 46806
219/447-5585

Chemical Waste Management, Inc.

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)

If sampling requirement has been waived by Chemical Waste Management, Inc., do not complete this Generator's Certification of Representative Sample form.

- ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
- ☒ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)

Soil

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

- Waste Profile Sheet Code:
- Generator's Name:
- Name of Waste:
- Sample Hour/Date:
- Sampler's Signature:

- Waste Profile Sheet Code:
- Generator's Name:
- Name of Waste:
- Sample Hour/Date:
- Sampler's Signature:

- Print Sampler's Name: Leonard N. Zintak Jr.
- Sampler's Title: On Scene Coordinator
- Sampler's Employer (if CWM, see D. below): U.S. EPA - Region 5

D. WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.

I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

- Witness' Signature: Charles Canon
- Witness' Name: Charles Canon
- Witness' Title: Environmental Scientist
- Witness' Employer: Roy F. Weston, Inc.
- Date: 9/15/85

STATE BOARD OF HEALTH

INDIANAPOLIS

OFFICE MEMORANDUM

DATE: February 25, 1981

TO: Earl Bohner

THRU: Skip Powers
John Winters

FROM: John R. Hayworth

SUBJECT: Waste Solvent Spill at
Conservation Chemical
in Gary

On Tuesday, December 22, 1981, at 11:10 a.m., Mr. Dale Chapman, General Manager for Conservation Chemical Company, Box 5066, 6500 Industrial Highway, Gary, Indiana 46406 (219/949-8229), reported a 16,000-gallon spill of waste solvents. The spill was the result of a leaking valve on a storage tank that contained approximately 21,600 gallons of waste solvents.

The material that left the storage tank pooled in two areas surrounding the damaged tank. The material had been analyzed by General Testing Laboratories in Kansas City, Missouri. This analysis was used by Conservation Chemical to determine their cleanup procedure. That analysis was as follows:

Methylene chloride	44.5%
Ethyl alcohol	12.5%
Ethyl acetate	12.0%
Xylene	5.0%
Toluene	2.0%
Napthas	5.0%
Heavy oil	18.0%
Flash point of 1°F	

On December 22, Dr. George Madany, of the EPA, investigated the spill and checked for any explosion potential. Dr. Madany reported that all of the spilled material was contained, that the ground was frozen and, therefore, there was probably very little penetration, and that there was no explosion potential. The facility was also visited on December 22 by representatives of Gary Air Pollution Control, the Gary Health Department, and the Gary Fire Department.

On Wednesday, December 23, Mr. Richard Cleaton, of the Inspection and Investigation Section of the Indiana State Board of Health, inspected the spill site and was concerned that very little cleanup had been accomplished and that there was a groundwater contamination potential that was not being investigated. Conservation Chemical personnel, up until this time, had been removing the contaminated soil in approximately an 800-square foot area with hand

tools because of the explosion potential. A sample collected at this time from the pooled material was analyzed by the Indiana State Board of Health with the following results:

Methylene chloride	200 ppm
Ethyl alcohol	not available at this time
Ethyl acetate	not available at this time
Xylene	150 ppm
Toluene	100 ppm
Napthalas	not available at this time
Oil	not available at this time
Trichloroethylene	370 ppm
Methyl ethyl ketone	740 ppm
Ethylbenzene	28 ppm
1,1,1 trichloroethane	250 ppm
pH	6.4
Flash point	not available at this time

On Thursday, December 24, General Drainage arrived on the scene with vacuum equipment to pump up the liquid remaining on the ground. According to an attached report from Mr. Chapman, approximately 3,000 gallons of liquid was picked up and transferred to an empty storage tank at the site. Manual cleanup was continued on December 26 and 27.

According to Mr. Chapman, on Monday, December 28, samples of the contaminated soil that was being placed into 55-gallon recovery drums at the site were taken. A torch was used by Conservation Chemical personnel to try to ignite the samples. No ignition occurred. After this determination, a front-end loader was used by facility personnel to remove the contaminated soil and place it into an empty open-top vertical storage tank at the site. The cleanup was completed on December 31. A total volume of excavated soil has not been calculated by Mr. Chapman.

I visited the site on Wednesday, January 6, at which time photographs were taken of the spill site after the cleanup had been completed. Photographs were also taken by Mr. Cleaton on December 23. During my inspection, the areas that had been excavated were frozen over. Drums containing the recovered soil were sitting in the locations where they were filled. Mr. Chapman stated that no groundwater contamination had occurred during the incident. The material that spilled had been in the storage tank for approximately ten years, according to Mr. Chapman.

On Tuesday, January 12, Mr. Cleaton and Dr. Madany made a joint inspection of the facility at which time groundwater samples were to be taken. Samples were not taken because of the frozen condition of the site. Dr. Madany stated that the cleanup was adequate.

In 1978, Mr. James M. King, at that time a member of the Solid Waste Section of the Indiana State Board of Health, prepared a study of the geologic/hydrogeologic characteristics of the Conservation Chemical Company. Mr. King states "The hydrogeologic environment beneath the

Conservation Chemical Company facility is extremely vulnerable to groundwater pollution." Mr. King further states that "Spills and leakage from drums and bulk storage are specially potentially destructive." A copy of Mr. King's study is attached.

Based on the available information, staff recommends that enforcement action be taken requiring groundwater sampling to be done by Conservation Chemical Company. Conservation Chemical Company should also be required to submit to the Indiana State Board of Health a copy of their spill contingency plan.

JRH/bo

Attachments

cc: Joe Stallsmith
George Halloran
Dick Cleaton
Jim Hunt
✓ Jim Knoy
Dave Lamm

JANUARY 18, 1982

SUBJECT: DISCHARGE FROM SOLVENT STORAGE TANK 1-S
CONSERVATION CHEMICAL COMPANY; GARY, IN

On Tuesday, December 22, 1981, at approximately 9:30 AM, it was discovered that the discharge nozzle from Solvent Tank 1-S had broken between the tank and the discharge valve. While a very, very small liquid stream was coming from the tank discharge nozzle, it was obvious a relatively large discharge had occurred. It was observed that the discharge was contained within bermed areas. It was determined that approximately one third of the original volume was still in the tank. Pipe threads on the broken discharge nozzle were carefully cleaned and a pipe cap was installed to prevent any further discharge.

Dale Chapman of Conservation Chemical Company called the Indiana Emergency Center at 317-633-0683 and reported the incident to Mr. Skip Powers. Mr. Chapman then called the National Response Center at 800-424-3602 and talked to Petty Officer Mackey. Mr. Chapman also called the Gary Fire Department and talked to Mr. Spiro and Mr. Casper Jones.

The plant was subsequently called by Dr. George Madany of the USEPA in Chicago (312-886-3011). Petty Officer Crowder of the "Coast Guard Marine Safety Officer" (312-353-4206) also called the plant.

In all of the above contacts, available details including the analysis of the solvent, description of the failure, rough estimate of volume, the containment of the spill, etc. were supplied.

Since available analytical information indicated flammability, plant personnel took appropriate action to prevent ignition. The entire spill area was roped off and warning flags and signs were attached. Access to the plant area was also limited to some degree. The E J & E railroad was notified to avoid any rail movements on the plant spur and prevent any accidental problems in relation to the line between the plant property and the Gary Airport.

Dr. Madany of the USEPA visited the site early in the afternoon of December 22. He had a portable explosion and flammability analyzer which did not give any indication of either hazard. We also noted that the ground was quite frozen so that penetration of the solvent into the ground was quite unlikely.

On the 22nd, the plant was also visited by Mr. Dennis McGuire and Mr. Mitchell Walton of the "Gary Air Pollution Control", Mr. James Gray of the "Gary Board of Health" and Deputy Fire Chief Joel Massa, Mr. Spiro and another associate from the "Gary Fire Department". Mr. Richard Cleaton of the "Indiana State Board of Health" visited the plant on December 23rd and made several subsequent visits. John Hayworth of the "Indiana State Board of Health" in Indianapolis visited the plant January 6, 1982. There were also several telephone conversations with Mr. Jim Kanoi of the "Indiana Board of Health".

Although Conservation Chemical Company's normal hours are 8 AM to 4:30 PM, as requested by the USEPA, arrangements were made to have someone at the plant around the clock. Due to anticipated flammability problems, limitations were established for safety. Plant operations were shut down and additional personnel were obtained to assist in clean up efforts. Initial efforts involved manually shoveling material into drums. General Drainage was contacted and hired to utilize a vacuum truck to suck up solvent material which had pooled on the ground.

The first opportunity to use General Drainage was the morning of December 24th. They were able to pick up about 3,000 gallons of liquid which was transferred to an empty storage tank at the plant site. Manual cleanup was continued on Saturday and Sunday, the 26th and 27th. On Monday December 28th, samples of contaminated ground were obtained and crudely tested for flammability. None of the samples could be ignited with a torch. Since flammability was not a problem, we were able to use a front end loader to scrape up contaminated soil. The speed of the clean-up was significantly improved. Contaminated soil picked up with the loader was put into another empty storage tank at the plant site. Cleanup was completed by December 31st.

Mr. Madany of the USEPA and Mr. Cleaton of the Indiana State Board of Health visited the plant again January 12, 1982 and inspected the spill site. No additional activities are planned for the immediate future. When the weather permits and the collected materials are thawed, representative samples will be obtained and analyzed to determine proper future disposition.

APPENDIX H



Telephone Conversation Log

Date & Time of Call: 7/11/07 10:15A

To [x]/From []:

Contacts Name:

Company/Regulatory Agency Name: City of Gary Fire Department

Phone Number: 219-881-5220

Fax Number:

Address: 200 E. 5th Avenue
Gary, IN 46402

QEPI Personnel: N. Vijay

Site & Subject: Gary Conservation Chemical Environmental Records Search

Discussion: Spoke with a representative from the fire dept. regarding records available pertaining to incidents or responses at the subject site. The representative directed us to contact Doreen Curry with the City's Environmental Affairs office.

Action Items: Contact environmental affairs.

Signature: [Signature]

Title Telephone Conversation Log	OSM Revision R4	Date Effective 9/28/00	Form # FM037
Section Entire Organization	Prepared by erb	Approved by dep	Page 1 of 1



Telephone Conversation Log

Date & Time of Call: 7/11/07 15:15P

To [x]/From []:

Contacts Name:

Company/Regulatory Agency Name: City of Gary Office of Environmental Affairs

Phone Number: 219-882-3000

Fax Number:

Address: 839 Broadway Ave, 2nd Floor
Gary, IN 46402

QEPI Personnel: N. Vijay

Site & Subject: Conservation Chemical Environmental Records Search

Discussion: Spoke with a representative from the office of Environmental Affairs regarding available records pertaining to the subject site. The representative stated that they were aware of numerous investigations & reports available for the property & recommended we conduct a file review at IDEM for a complete record.

Action Items: File review at IDEM

Signature: [Signature]

Title Telephone Conversation Log	OSM Revision R4	Date Effective 9/28/00	Form # FM037
Section Entire Organization	Prepared by erb	Approved by dep	Page 1 of 1



GARY/CHICAGO INTERNATIONAL AIRPORT

6001 W. Industrial Hwy
Gary, Indiana 46406
Tel: 219/949-9722
Fax: 219/949-0573
www.garychicagoairport.com

FACSIMILE TRANSMITTAL SHEET

TO:	NIVAS VIJAY	FROM:	BOB GYURAO
COMPANY:	QEP I	DATE:	7-16-2007
FAX NUMBER:	574-234-1615	TOTAL NO. OF PAGES INCLUDING COVER:	5
PHONE NUMBER:	574-234-1475	SENDER'S REFERENCE NUMBER:	
RE:		YOUR REFERENCE NUMBER:	

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

COMMENTS:

If you do not receive all pages as indicated above or the transmittal is illegible, please call (219) 949-9722.
Thank you.



Phase I Environmental Site Assessment Questionnaire

CONSERVATION COUNCIL SITE

Property Owner /Manager: Description of Site/Address:

Name: ROBERT CHURNO

Title: PROJECT MANAGER

Address & Phone Number 6001 W INDUSTRIAL HIGHWAY 6000 10/46406
219-949-4912

Question										
1. Proceedings involving the property:										
Are there any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property?								<input checked="" type="radio"/> Yes	No	
Are there any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property?								<input checked="" type="radio"/> Yes	No	
Are there any notices from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum?								<input checked="" type="radio"/> Yes	No	
Question			Owner			Property Manager (if applicable)			Occupant	
2a. What was the prior use of the property?			Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: <u>REFINERY</u>			<u>HAZ MAT STORAGE + DISPOSAL?</u>							
2b. What was the prior condition of the property?			Yes	No	<input checked="" type="radio"/> Unk	Yes	No	Unk	Yes	No
Comments: <u>UNK</u>										
2c. What is the current use of the property?			Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: <u>NONE</u>										
3a. Has prior use of the site included the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products?			Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: <u>YES</u>										
3b. Is the property currently used to treat, store, dispose, or generate hazardous substances or petroleum products?			Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: <u>YES</u>										



Phase I Environmental Site Assessment Questionnaire

(Continued)

Question	Owner			Property Manager (if applicable)			Occupant	
4. Historically or are the adjoining properties or areas used/ use, as treatment, storage, disposal, or generation of hazardous substances or petroleum products? (Examples: gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?)	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: YES GO TANE WESTERN SCRAP								
5a. General Description of Buildings?	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: SMALL OIL COLLECTION PUMP HOUSE								
5b. Description of road, parking areas, thoroughfares?	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: NONE								
6a. Source of water supplies on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: NONE								
6b. Sewage disposal for the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: NONE								
7a. Are there any aboveground storage tanks or underground storage tanks on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: NONE								
7b. Have you noticed strong, noxious, or pungent odors on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: YES								



**Phase I Environmental
Site Assessment Questionnaire**
(Continued)

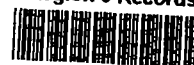
Question	Owner			Property Manager (if applicable)			Occupant	
8a. How is the building(s) heated and/or cooled?	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: <u>ELECTRIC</u>								
8b. Are there stains, corrosion or stressed vegetation on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: <u>YES</u>								
9a. Are there sources of PCBs at on the property? (Examples: electrical transformers)	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: <u>YES</u>								
9b. Have there or are there any lagoons, ponds or pits located on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: <u>YES</u>								
10a. Have or is waste water generated at the site?	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: <u>YES OIL COLLECTION SYSTEM WATER IS SKIMMED AND REINJECTED</u>								
10b. Are there any wells on the property? (Including dry wells, irrigation wells, injection wells, abandoned wells, or others)	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: <u>TEST WELLS</u>								
11. Are there any septic tanks/systems on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
Comments: <u>NO</u>								

0000001

GARY MUNICIPAL AIRPORT AUTHORITY

GARY, INDIANA

EPA Region 5 Records Ctr.



224900

HAZARDOUS WASTE

ASSESSMENT

AT

CONSERVATION

CHEMICAL COMPANY

FINAL REPORT
October, 1983

HAVENS AND EMERSON

CONSULTING ENVIRONMENTAL ENGINEERS

CLEVELAND - ATLANTA - ST. LOUIS - BOSTON
GARY, INDIANA - SADDLE BROOK, N.J.

HAVENS AND EMERSON LTD. CONSULTING ENVIRONMENTAL ENGINEER

HAVENS AND EMERSON INCORPORATED

CONSULTING ENGINEERS

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MICHAEL C. MULBARGER
LAWRENCE J. PAPES
PETER W. DOE
JAMES L. BUTTLE
JAMES P. HARRIS

GARY OFFICE
GARY NATIONAL BANK BUILDING
SUITE 731
504 BROADWAY
GARY, INDIANA 46402
219/886-2066

WATER RESOURCES
POLLUTION CONTROL
SEWERAGE DRAINAGE
WASTEWATER TREATMENT
INDUSTRIAL WASTES
SOLID WASTES DISPOSAL
AIR POLLUTION CONTROL
RATE INVESTIGATIONS
SANITARY LABORATORIES
AREAWIDE PLANNING

October 26, 1983

Re: Hazardous Waste Assessment
at Conservation Chemical Co.
(Our File No. 1-1478-01-1)
Final Report Draft

Dr. A. William Douglas, Director
Gary Municipal Airport Authority
6131 Industrial Highway
Gary, Indiana 46406

Dear Dr. Douglas:

Enclosed please find the Final Report on the subject study.

The objectives of the study were to identify hazardous materials on the site, to determine whether contamination of soil and groundwater constitutes a problem and to estimate the costs required for cleanup of the site in conjunction with acquisition for a proposed airport expansion project. Our assessment of hazardous waste material problems at Conservation Chemical Co. is based upon site inspections, detailed analysis of samples obtained in the course of these inspections and review of documentary material. The scope of sampling activities was limited by disagreements between the Airport Authority and the Company regarding permissions for such sampling.

Subject to these limitations the following areas were identified as requiring remedial action.

- . Removal and disposal of impounded hazardous solid materials impounded in the pie shaped basin and elimination of currently uncharacterized "eruptions" there.
- . Collection and treatment of oil contaminated groundwater.
- . Removal and disposal of "neutral acid sludge" hazardous material contained in Tank 20.

 60 YEARS of SERVICE

CLEVELAND • SADDLE BROOK, N.J. • ATLANTA • ST. LOUIS • BOSTON • GARY

Mr. William Douglas
October 26, 1983
Page 2

- Removal and disposal of contaminated soil may be required particularly for any such soil found in the taxiway path, pending sampling and analysis. Neutralization may suffice for acid-contaminated soil between the pie basin and Tank 19.

Cost estimates indicate that restoration of the Conservation Chemical Co. property will require substantial investment on the part of the airport. The minimum investment is estimated at \$640,000, and in the worst case it would conceivably be as high as \$6,900,000. The range of estimated costs reflects uncertainties that can be resolved with recommended additional studies.

Details are presented in the Executive Summary and the text of the report. Documentary material is included in several appendices.

This submittal completes fulfillment of our contract terms for the Hazardous Waste Assessment. We are pleased to have been of service to the Gary Municipal Airport Authority and look forward to future assignments in this and other areas of environmental engineering.

Sincerely yours,

HAVENS AND EMERSON, INC.

Richard Prober

Richard Prober, PhD., P.E.
Project Manager

Gary M. Siegel

Gary M. Siegel, P.E.
Principal-in-Charge

RP:saj



HAVENS AND EMERSON, INC.

GARY MUNICIPAL AIRPORT AUTHORITY
HAZARDOUS WASTE ASSESSMENT AT CONSERVATION CHEMICAL CO.

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GARY MUNICIPAL AIRPORT AUTHORITY
HAZARDOUS WASTE ASSESSMENT AT CONSERVATION CHEMICAL CO.

EXECUTIVE SUMMARY

Conservation Chemical Company of Illinois has conducted operations at a site west of the Gary Municipal Airport, which is planned for acquisition in an airport development project. The company manufactures iron salt coagulants, using waste pickling liquor from local steel mills as raw material.

The property apparently has been used for storage, treatment and/or disposal of hazardous material by Conservation Chemical Co. or by previous owners. Acquisition for the Airport expansion would entail closure and cleanup of the site, including removal and disposal of stored hazardous wastes as well as decontamination and disposal of tanks and equipment. It also may be necessary to deal with contaminated soil and groundwater.

The Gary Municipal Airport Authority retained Havens and Emerson, Inc. as prime contractor for a study to assess the extent of the problems at the Conservation Chemical Company site, in order to guide their decisions regarding acquisition of that property and expenditure of airport development funds. The objectives were to identify hazardous materials stored on the site; to determine whether soil and groundwater contamination constitutes a problem; and to estimate the costs required for cleanup of the site.

The scope of activities at the site has been limited by disagreement between the Airport Authority and Conservation Chemical Co. regarding permissions for sampling from tanks and stored drums and soil boring. However, on the basis of limited groundwater monitoring using new wells located on adjacent property, as well as information provided by the Company and documents from EPA files, an initial assessment can be made concerning hazardous waste problems on this site. In brief, the anticipated problem areas which can affect the property acquisition by the Airport are as follows:

- . The pie-shaped basin at the southern apex of the triangular site is a lagoon which has been used for disposal of slop oils and waste solids from neutralization of steel pickling liquor. A portion of this area is directly in the path of runway extension, and the unconsolidated solid material must be removed at least to a depth of six feet below the existing surface and replaced with clean fill to provide adequate soil mechanical properties. Removal operations will be complicated by possible "eruptions" and gas emissions originating below the six-foot depth and attributed to possible buried reactive waste or putrescible organic solids. Hazardous materials present in the solids will require costly ultimate disposal methods.
- . An acid-contaminated soil zone adjoining the basin north of the railroad spur extends toward Tank 19. Conservation Chemical Co. presently pours soda ash on the soil, as necessary to neutralize ponded surface water. Portions of this soil may have to be removed for the taxiway extension.
- . Contaminated soil may be present elsewhere on the site as a result of recent process chemical spills associated with the ferric chloride manufacturing activities, leakage or spills from tanks or drums containing hazardous material and residues of oil product spills dating from the refinery. In addition, leakage from buried abandoned piping may also contaminate the soil.
- . Ground water monitoring at new wells (installed as part of this study) just outside the site shows contamination with chlorinated organics, cyanides, phenols and heavy metals. It is not possible to assess whether the contamination

originates on the Conservation Chemical Co. property without additional wells on their land.

- . Oil-contaminated groundwater has been found on the site, seeping into pit excavated by Conservation Chemical Co. The source and extent of contamination cannot be determined without further excavation or soil boring. Although the oily material is free of hazardous components, some remedial action will be required.
- . Tanks and process equipment in the path of the runway-taxiway extension must be dismantled and removed. Conservation Chemical Co. acknowledged in inventories filed with the U.S. Environmental Protection Agency that hazardous materials have been stored in their tanks and equipment, but they maintain that, with one exception noted below, these are marketable "materials in process" and will be removed prior to the title transfer.
- . Tank 20 contains the admittedly unmarketable sludge resulting from neutralization of steel mill pickling liquor, which has characteristics similar to the solids at the top of the pie basin.
- . Drums stored on the site, which potentially can add to soil and groundwater contamination, must be removed. Conservation Chemical Co. acknowledged in inventories filed with the EPA that some drums may contain hazardous materials, but maintains that those drums are "materials in process" which will be removed prior to the title transfer.

The alternatives considered for remedial action were as follows:

- . Remove solid material from the pie-shaped basin as necessary for grading the runway extension as well as to uncover and remove the source of eruptions. This will have to be done stage-wise, since the depth and volume of removal has not been determined precisely.
- . Treat the material removed from the pie-shaped basin and neutral acid sludge from Tank 20 by chemical fixation, if the recommended study shows this to be feasible, and dispose of it on site; alternatively, arrange hauling and off-site landfill disposal with lime pretreatment as necessary for hauling stability.
- . Neutralize the acid contaminated soil zone by addition of lime or limestone.

- . Remove and replace all other contaminated soil and arrange off-site landfill disposal.
- . Collect oily groundwater seepage at the existing unlined pit, separate the oil and arrange for reclamation or off-site disposal, if necessary.
- . Decontaminate tanks and process equipment (if necessary), demolish and arrange salvage or off-site disposal.

The costs required to carry out the required remedial actions, allowing for the uncertainties discussed above, are estimated to range from \$640,000 with the best possible circumstances to as much as \$6,900,000 in the worst case.

Due to the numerous uncertainties, the following are recommended as initial remedial actions, in conjunction with a program of additional sampling and analysis to resolve the uncertainties.

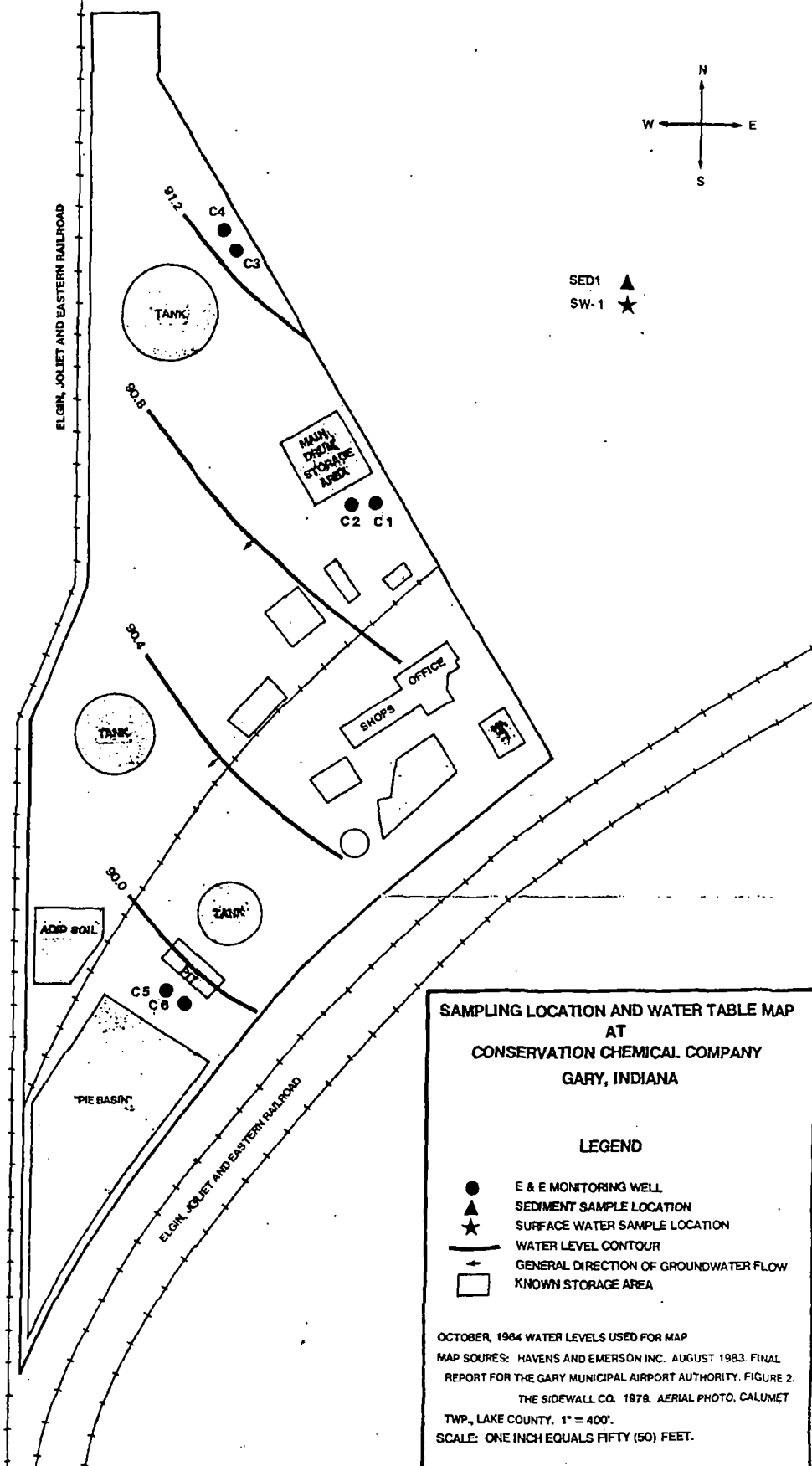
- . Remove the pie basin solids, and arrange ultimate disposal based on results of gas emissions monitoring and chemical fixation tests.
- . Remove the neutral acid sludge from Tank 20 and arrange ultimate disposal together with the pie basin solids.
- . Empty and abandon Tank 19 and install oil collection equipment at the existing seepage pit, if necessary.

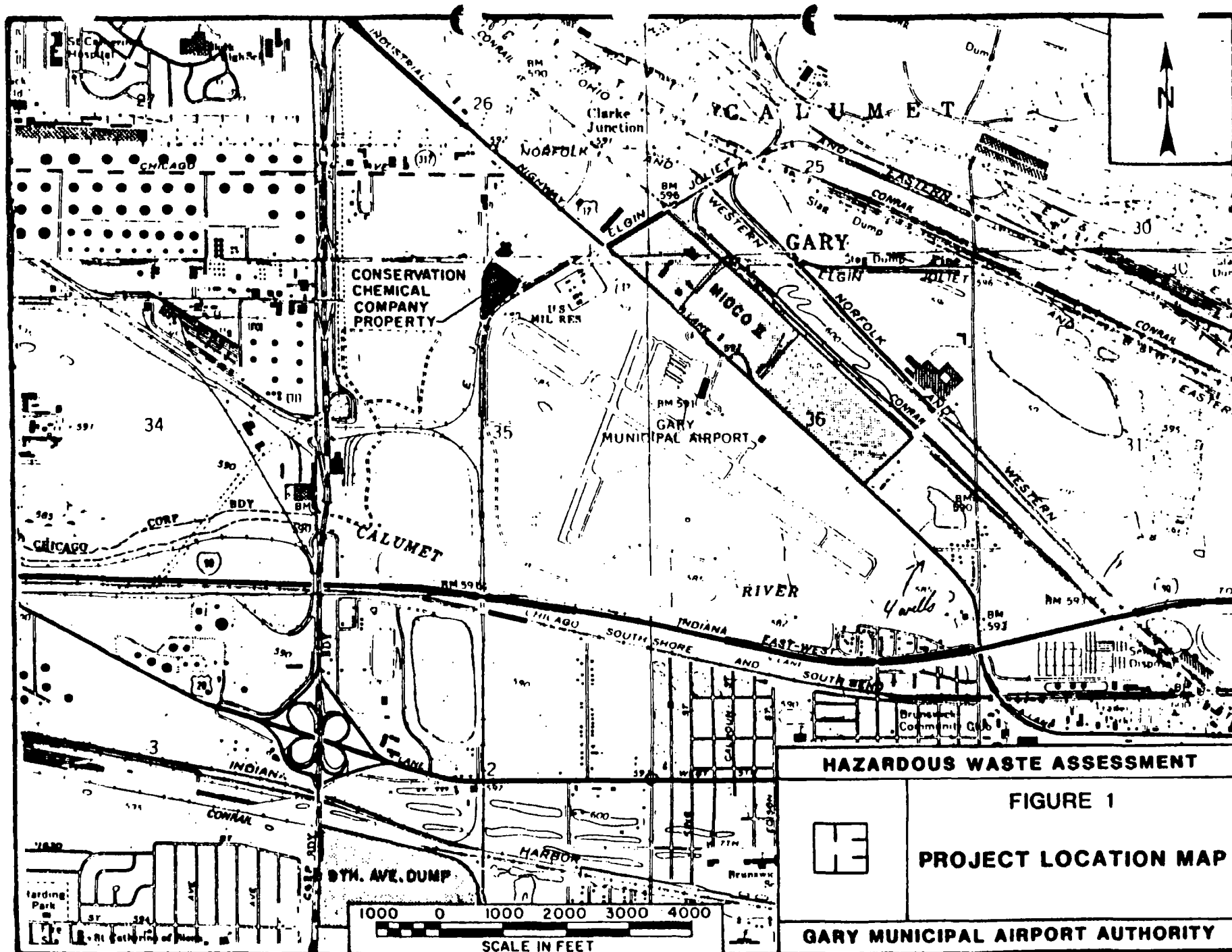
Additional studies, needed to define remedial actions, are as follows:

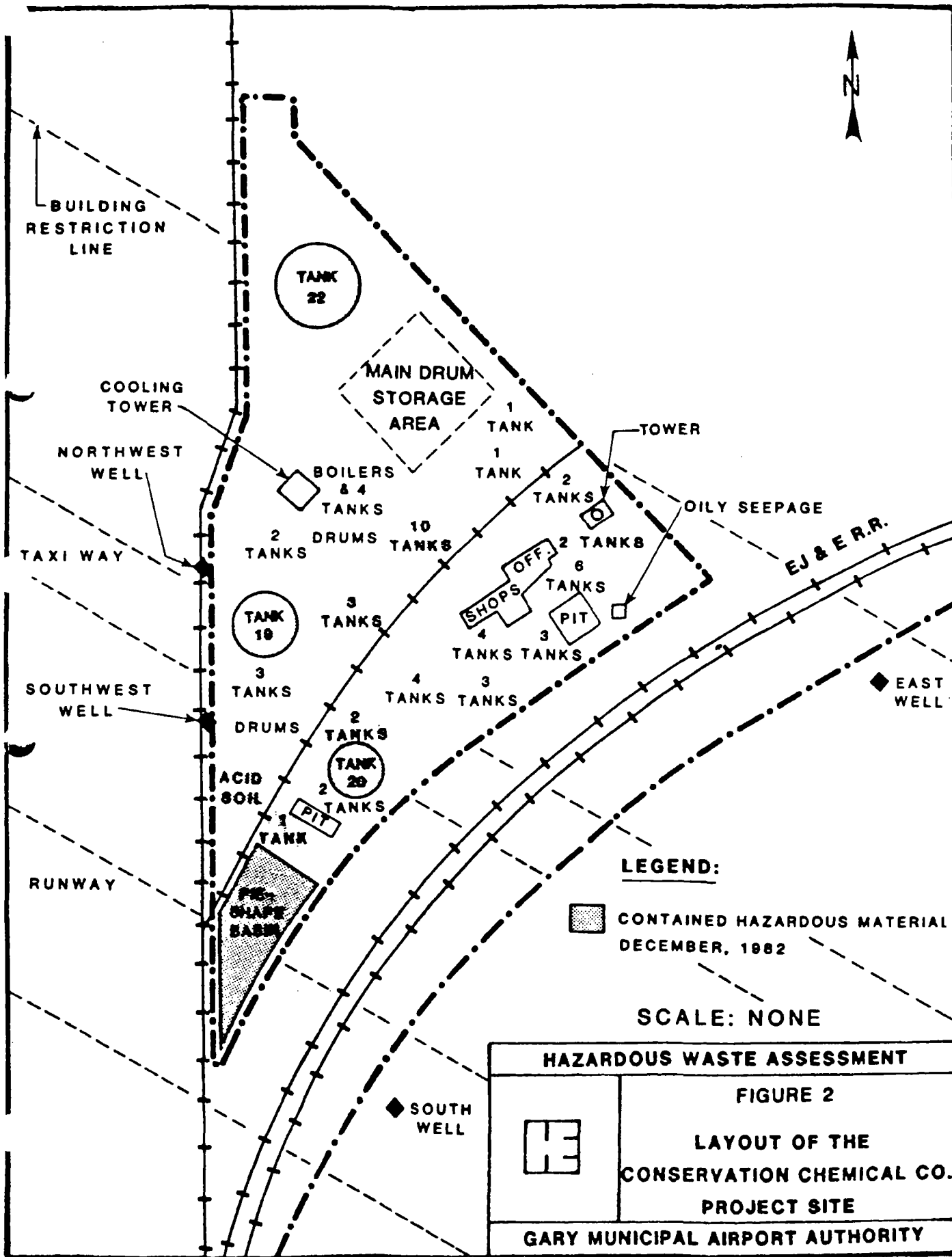
- . Continue groundwater monitoring at the four wells installed in this study, in conjunction with new wells on the Construction Chemical Co. property. This is needed for definitive judgment whether groundwater contamination does or does not originate on the site.
- . Carry out limited soil boring on the site, particularly at the acid contaminated zone, in the path of the taxiway and in the vicinity of tanks, process units and drum storage. This is necessary for determination of existing soil contamination and potential future groundwater contamination.
- . Sample eruption gases on the pie shaped basin, to define the source of eruptions.
- . Arrange feasibility tests for chemical fixation of solid materials from the pie-shaped basin and neutral acid sludge from Tank 20, to establish whether this can render these

materials non-hazardous, to determine mechanical properties of the resultant solids and to refine cost estimates.

- . Defer inspection of tanks, process units and drums and sampling of stored materials until the time of property transfer, to verify removal and decontamination by Conservation Chemical Co.







SITE CHARACTERISTICS

Figure 1 shows the project location superimposed on U.S. Geological Survey topographic maps (Highland and Whiting quadrangles, Lake County, IN). The Conservation Chemical Co. property is a 4.1 acre triangular parcel just west of the existing Airport boundaries, and bounded on two sides by Elgin, Joliet and Eastern Railroad right-of-way. The planned 1,300-foot extension of Runway 12, the east-west runway, is seen to pass through the southern half of the Conservation Chemical Co. property and also to require relocation of the adjoining railroad tracks.

The immediate area has been heavily industrialized, with petroleum refineries and steel mills seen to the north and west and no residential areas within one mile. The Conservation Chemical Co. site and adjoining parcels were at one time the site of the Berry Oil Co. petroleum refinery. Three previously identified hazardous waste sites are within a short distance from the project location, the closest being MIDCO II which also borders Airport property on the north. The Ninth Avenue dump at the extreme south of the map is one of the 418 nationally designated priority action sites, and MIDCO I, just off the map on 15th Avenue, had initial remedial action under "Superfund" during 1982.

The topography in the area is relatively flat. Elevations on the site range from about 595 feet in the pie basin to 590 feet along the northeast boundary. (The runway elevation is 591.5 feet.) Natural surface water drainage elsewhere in this vicinity is southward, into

the Grand Calumet River which is typically at elevation 582-583 feet (100-year flood elevation = 587.0 feet). However, owing to the railroad embankments, drainage on the project site is northward.

The area was a wetland prior to industrial development in the late 1800s and early 1900s. The original soils (where present) are sandy and characteristic of being at the lake bottom in former geologic times. The shallow groundwater aquifer (the Calumet aquifer), consists of highly permeable fine sand deposits extending about 10 miles southward from the Lake Michigan shoreline in the Gary vicinity. This unconfined aquifer ranges from 5 to 75 feet in thickness, averaging 20 feet, and is generally within 15 feet of the surface. It overlies nearly impermeable clay till averaging about 50 feet in thickness. The aquifer is not a significant source of water supply (1). However, it is regarded as particularly susceptible to contamination as it discharges the base flow for the Little Calumet River, the Grand Calumet River and their tributaries, as well as discharging either laterally into Lake Michigan or vertically through the underlying till into bedrock.

Figure 2 shows the Conservation Chemical Co. property in greater detail and designates approximate locations of the potential hazardous waste problems. (Figure 2, which is based upon information from other maps and aerial photographs provided by the Airport Authority and sketches provided by Conservation Chemical Co., has not been validated for accuracy. A detailed survey map of the southern half of the site and adjoining properties was developed as part of this study. A copy

of this map is included in the Appendix.) Table 1 is an inventory of tanks and process units, which identifies those currently or previously containing hazardous materials.

The principal structural features shown in Figure 2 are the office/shops building, three large tanks, two concrete lined pits, a distillation column (tower) and a forced-draft cooling tower, all remnants of the original petroleum refinery. In addition, there are 53 smaller tanks and a number of process units and small structures within a 250-foot radius from the office/shop building, and about 300 drums, at the main drum storage area and at other locations scattered around the site. The pie shaped basin at the southern apex of the triangular site and the two pits located to the southwest of the railroad space appear to be remnants of the refinery wastewater treatment and disposal system.

The southern portion of the site is directly in the path of the runway and taxiway expansion. The building restriction line 750 feet north of the runway center line passes near the northern site boundary. Besides the usual land clearance and site preparation, the proposed airport expansion project may also involve remedial actions for hazardous waste problems associated with past and present industrial activity on the site. The problems and proposed remedial actions are presented in detail, following delineation of current activities on the site with potential for hazardous materials and identification of other hazardous waste problems.

TABLE 1

CONSERVATION CHEMICAL COMPANY

LOCATION AND CONTENTS OF STORAGE/TREATMENT TANKS

Based on Company sketch provided December 8, 1982 (dated August 22, 1982) and inventories dated June 1, 1981; May 26, 1981 and March 15, 1979.

Tank No.	Capacity Gallons	NW/SE from Hazardous Contents (if applicable)	Bisecting Spur	Vicinity of Major Feature
1	N/A	previously cyanide	NW	Tank 19
1-A	21,000	HCl pickle liquor (prev. copper)	SE	Office/Shop Bldg.
2	42,000	Solvent	SE	Office/Shop Bldg.
2-A	21,400	previously cyanide	SE	Office/Shop Bldg.
3	N/A	previously waste acid	SE	Tank 19
3-A	7,100+	-	NW	Office/Shop Bldg.
4(tub)	N/A	-	NW	Tank 22
4-A	21,400	Cyanide	NW	Office/Shop Bldg.
5(tub)	N/A	-	NW	Tank 22
5	3,000	Silica etch (acid)	SE	Northern Pit
6-A	N/A	Cyanide	NW	Office/Shop Bldg.
8-A	N/A	Cyanide	NW	Office/Shop Bldg.
11	N/A	previously caustic	NW	Office/Shop Bldg.
12	N/A	previously waste acid	SE	Northern Pit
14	N/A	prev. alkaline etch	SE	Office/Shop Bldg.
15	15,400	Solvent	SE	Tank 20
16	N/A	-	NW	Cooling Tower
19	143,250	Oil-Water Sludge	NW	--
20	412,504+	Neutral Acid Sludge	SE	--
22	711,753	Fuel Oil & Asphalt	NW	--
23	3,500+	previously cyanide	NW	Office/Shop Bldg.
25	17,094	Solvent	SE	Tank 20
26	15,000	Cyanide	SE	Tank 20
28	18,000	Cyanide	NW	Office/Shop Bldg.
41	N/A	-	NW	Office/Shop Bldg.
CB-1	1,700+	previously process waste	NW	Cooling Tower
CB-2	1,200+	previously copper	SE	Office/Shop Bldg.
CB-3	10,000+	-	SE	Office/Shop Bldg.
CB-4	12,500+	-	SE	Office/Shop Bldg.
CDU-1	N/A	- SE	Tank 20	
CY-1	18,000	previously cyanide	SE	Tank 20
D-1	10,900	Solvent (partially CH_2Cl_2)	NW	Office/Shop Bldg.
DB-1	N/A	Cyanide	SE	Tower
DT-3	N/A	-	NW	Tank 19
F-1	N/A	previously copper	SE	Office/Shop Bldg.

TABLE 1CONSERVATION CHEMICAL COMPANYLOCATION AND CONTENTS OF STORAGE/TREATMENT TANKS
(Continued)

<u>Tank No.</u>	<u>Capacity Gallons</u>	<u>NW/SE from Hazardous Contents (if applicable)</u>	<u>Bisecting spur</u>	<u>Vicinity of major feature</u>
F-1	N/A	-	NW	Tank 19
F-2	N/A	-	SE	Office/Shop Bldg.
F-3	N/A	-	SE	Office/Shop Bldg.
F-4	N/A	-	NW	Tank 19
MT	N/A	-	NW	Cooling Tower
R-1	N/A	-	NW	Tank 19
R-3	N/A	-	SE	Northern Pit
R-15	5,000	previously copper	SE	Tank 20
R-17	N/A	-	NW	Tank 22
R-20	N/A	-	NW	Cooling Tower
R-21	N/A	-	NW	Cooling Tower
R-30	6,000	previously pickle liquor	SE	Office/Shop Bldg.
R-31	8,000	waste acid	SE	Tank 20
R-33	1,600	previously copper	SE	Northern Pit
R-38	N/A	-	SE	Northern Pit
RR-1	7,500	previously cyanide	SE	Northern Pit
RR-2	7,500	Cyanide	NW	Tank 19
Sphere	9,000+	Cyanide	SE	Tower
ST-1	N/A	Cyanide	NW	Tank 19
Tower	19,650+	Cyanide	SE	-
TR-38	N/A	Cyanide	SE	Tank 20
WC	N/A	-	NW	Cooling Tower
X	N/A	-	NW	Office/Shop Bldg.

Note: + designates largest volume noted in inventory records as less than full.

TABLE 1

CONSERVATION CHEMICAL COMPANY

LOCATION AND CONTENTS OF STORAGE/TREATMENT TANKS

(Continued)

The following information pertains to apparently abandoned tanks, which were included in previous inventories, but did not appear on the August 1982 site map.

<u>Tank No.</u>	<u>Hazardous Contents (if applicable)</u>	<u>Previous Inventory</u>	<u>Capacity Gallons</u>
6	Waste acid	1979 inventory	N/A
7	--	1979 inventory	N/A
8	--	1979 inventory	9,600+
10	Caustic	1979 and 1981	2,000+
18	Waste acid	1979 inventory	N/A
27	Hydrofluoric acid	1979 inventory	N/A
C-1	Cyanide	1979 and 1981	3,000
R-34	Previously copper	1979 and 1981	4,000
S-1	Cyanide	1979 and 1981	9,000

CONSERVATION CHEMICAL CO. ACTIVITIES

Conservation Chemical Co. has conducted operations at this site since April, 1967. The company manufactures iron salt coagulants, principally ferric chloride, by reaction of steel mill waste pickling liquor with chlorine and scrap iron. It is one of the principal suppliers nationwide of ferric chloride. The company is also a licensed transporter of hazardous materials. (IND 040888992).

The railroad spur which bisects the site is used for tank car loads of ferric chloride (product) as well as chlorine (raw material). Waste pickling liquor (raw material) is delivered by tank trucks entering over an unpaved road parallel to the spur. Activities connected with production of ferric chloride generally are limited to the process units and small storage tanks closest to the office/shop building.

Conservation Chemical Co. applied to the U.S. Environmental Protection Agency for hazardous waste storage permits on November 9, 1980. Their application acknowledged that other hazardous materials, including cyanides, chlorinated organic solvents, mixed copper-iron hydroxide sludge resulting from treatment of plating waste, and oily wastes have been stored in tanks at various locations around the site. (See Figure 2). The company maintains that these materials, like their current raw material and product inventory, are marketable and will be removed prior to acquisition of the site by the Airport Authority. The company also acknowledged that about 300 drums are stored on site, and

that some of these are "Recovery Drums" containing contaminated soil removed after a solvent spill.

The following sections describe problem areas at the site, based on sampling and analysis and visual inspection activities carried out by Havens and Emerson on behalf of the Airport Authority, supplementary information supplied by Conservation Chemical Co. and information on the Company from U.S. Environmental Protection Agency files released through Freedom-of-Information requests. (Copies of documentation and analytical laboratory reports are included in the Appendix.) Sampling activities on the site allowed by the Company were limited to test borings in the pie-shape basin, and the oily seepage into their backhoe pit. (Conservation Chemical Co. later granted permission for hand auger soil boring and analysis of samples so derived, however, after completion of the field activities in this study.)

The presentation of problem areas first considers the pie-shaped basin and soil contamination in adjoining areas directly in the path of the runway extension, proceeds to the disposition of tanks and drums containing hazardous materials and concludes with a discussion of present and potential future contamination of surface water and ground water. Following this, the conclusions of the present study and recommendations for further investigation and/or remedial action are summarized.

Pie-Shaped Basin

The area at the southern apex of the property, between the railroad spur and the foot of the main railroad embankment has been used as

a settling lagoon for disposal of hazardous waste materials. Its surface is elevated about four feet above the main plant area, apparently to ensure infiltration into the relatively high water table. Conservation Chemical Company estimated the surface impoundment volume at 600,000 gallons and the annual quantities as 500 tons of sludge resulting from lime treatment of spent steel mill pickle liquor (Hazardous Waste No. K062) and 2,100 tons of slop oil emulsion solids from petroleum refining (Hazardous Waste No. K049).

The surface material at the top of the basin consists mainly of very fine orangish solids (assumed to be principally ferrous hydroxide). The surface is flat except for "eruption" holes 6-12 inches in diameter, which are surrounded by small mounds of solids suggestive of large gas bubbles escaping through the mass of solids. The material has essentially no load bearing strength, and it was observed to yield readily at low stress. The employees refer to it as "quicksand" and tell of finding very deep footprint impressions of trespassers who walked across the basin. In sampling the basin solid materials, we found it possible to stand on the basin surface only with the aid of a wooden pallet to distribute weight over a large area.

The sampling of basin solids was limited to a ten foot wide zone across the northern end and to a depth of about six feet. Solid material from the five to six-foot depths appeared to be darker and more gritty than the surface solids. The samples were not obtained as discrete cores, since conventional soil boring rigs and hollow augers could not be used because of the basin material consistency. An

alternate technique enabled us to sample the solids from the limited zone described above, using a post-hole auger mounted at the end of a boom deployed from a truck backed up to the north edge of the basin. A single composite sample, believed to be representative of the top six feet for the entire basin, was produced and submitted for analysis to determine priority pollutants (except for volatile organic constituents). The results, as shown in Table 2, indicate high concentrations of phenols and heavy metals, as would be expected for solids in a lagoon used for disposal of refinery waste emulsion and neutralized steel mill pickling liquor. The complete analytical report is reproduced in the Appendix. The material is hazardous and will require off-site disposal at a hazardous waste disposal sites or chemical fixation treatment to permit on-site disposal.

The eruptions are difficult to explain except as gas emissions from buried materials, which may be either gases released by reactive material in buried containers upon contact with water, or by decomposition of putrescible material. The employees' remarks suggested that eruptions occur only during the warmer months, but we noted apparently fresh eruptions at midwinter. Sampling of the atmosphere inside fresh eruption holes would be needed to provide definitive identification of any gases evolved. Permission for such sampling was requested of Conservation Chemical Co., but is still pending.

A preliminary survey with remote sensing electromagnetic instruments (e.g., magnetometers) was considered, to resolve the question of buried reactive waste containers as a source of the eruptions.

TABLE 2

HAZARDOUS MATERIAL CHARACTERIZATION OF PIE-BASIN SOLIDS

(> >)

	<u>ug/gram air dried solids</u>	
	<u>Concentration</u>	<u>Detection Limit</u>
Organics		
Acid extractables		2-20
Phenol	11	2.0
Base Neutral extractables	N/D ^{a)}	10-25
Pesticides/PCB's	N/D	10
Inorganics		
Cyanides	30	0.15
Phenols	10	0.4
Heavy metals		
Antimony	4.9	0.05
Arsenic	0.58	0.05
Beryllium	1.5	0.02
Cadmium	11	0.02
Chromium	12,300	0.1
Copper	5,100	0.1
Lead	170	0.2
Mercury	0.33	0.0002
Nickel	660	0.1
Selenium	N/D	0.05
Silver	10	0.06
Thallium	0.31	0.05
Zinc	980	0.02

a) Below Detection Limit

Note: Samples digested with nitric acid before analysis.
 See Appendix for other details on methods of chemical analysis.

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However, it was not recommended since the technique has accuracy limitations and removal of at least five feet of surface materials at the top of the basin must proceed in any event to reach the grade level for the runway.

Some remedial action in the basin is certain to be required, but the nature of the action cannot be fully defined at present. The initial sampling of basin material was too limited in extent to define the amount of material to be removed beyond the grading requirement. Disposal elsewhere on the site or by landfill should be arranged for the solids removed from the basin. The remedial action must also eliminate or control the eruptions. Alternatives for remedial action in the basin are evaluated in the section on additional studies and remedial actions.

Tanks and Process Units

Conservation Chemical Company handles an estimated 15,000 tons/year of spent steel mill pickling liquor (Hazardous Waste No. K062), somewhat more than half of their nominal 25,000 gal/day process design capacity according to their hazardous waste permit application dated November 18, 1980. In addition to this "mainline" production, their application specifies 620,000 gallons of tank capacity and estimated annual quantities of other hazardous materials as follows:

Solvents - 260 tons

- (F001) spent halogenated solvents and degreasing sludges
- (F002) spent halogenated solvents and still bottoms
- (F003) spent non-halogenated solvents and still bottoms
- (F005) spent non-halogenated solvents and still bottoms

Electroplating waste sludges - 2000 tons

(F006) wastewater treatment sludges from electroplating,
including sludge from neutralization of spent pickle
liquor (K063).

Spent Plating Baths - 450 tons

(F007) spent electroplating baths
(F008) plating bath sludges (bottoms)
(F009) spent stripping and cleaning baths

The Company submitted its Closure Plan to EPA on July 2, 1981, as well as earlier inventories of stored materials dated March 12, 1979; May 26, 1981 and June 1, 1981. Based on this information, the record of an EPA inspection on November 19, 1980 and a Company site map sketch dated August 2, 1982, the list of storage and treatment tanks containing hazardous materials as of December 9, 1982, (or previously used for hazardous materials) in Table 1 was compiled, and their locations were shaded on Figure 2.

- . The solvents consist of about 85,000 gallons of methylene chloride-hydrocarbon mixtures. Analysis of samples in tanks 2, 15 and 25, as reported to Conservation Chemical Co. by General Testing Laboratories, Inc. of Kansas City, Missouri, showed organic chloride content of 8.5% to 14.5%, apparently based on specific gravity measurements. This may not be representative of current material, since inventory records indicate a net influx of about 42,000 gallons of solvents since 1979. The Company maintains that all stored solvents are marketable and will be removed upon sale.
- . The cyanides consist of about 150,000 gallons of low level plating wastes. Analysis of a partially solidified sample taken February 14, 1979 and reported to Conservation Chemical Co. in April, 1979 by General Testing Laboratories, Inc. of Kansas City, Missouri, showed the expected highly alkaline solution (pH 13.2) containing 1,187 mg/l zinc and 33 mg/l cadmium, as well as appreciable concentrations of nickel and chromium, which would suggest the origin of the waste as combined electroplating rinse wastewater from both cyanide

and acidic baths. This is not to be taken as representative of present material, since inventory records indicate a net influx of 78,000 gallons of cyanides since 1979. The inventory records also indicate shifting of cyanide storage to tanks away from the ferric chloride processing area and possible accidental exposure to acids, which was a concern expressed in the EPA inspection. The Company acknowledged that the cyanides are not marketable, and their 1981 closure plan called for destruction of the cyanides by chlorination under alkaline conditions, to be carried out on site at an estimated cost of \$25,000.

- . Tank 20 contains 412,504 gallons of "neutral acid sludge" resulting from neutralization of waste pickling liquor. Analysis of the material reported to the Company by General Testing Laboratories, Inc. of Kansas City, Missouri on June 23, 1978 shows 27.5% solids (5.50% iron, 1.78% chromium, 1.06% copper, 0.42% zinc, 0.14% nickel and ppm quantities of lead and cadmium) and the liquid phase containing 40 ppm chromium, 75 ppm copper, 14 ppm nickel and lesser amounts of the other metals. The analysis, which is similar to that of the pie basin solids (See Table 2) suggests that the chromium and copper may be present as a result of mixing spent electroplating or etching baths with pickle liquor. The material is hazardous, but no mention of it is made in the closure plan.
- . Fuel oil in Tanks 19 and 22 is probably marketable, although the presence of asphalt in Tank 22 may decrease its value. There is no mention of the fuel oil in the closure plan.
- . Small quantities of corrosive materials (other than steel pickling liquor) were present as of the May 1981 inventories, including 8,000 gallons of waste nitric acid and 2,000 gallons of caustic. Subject to analysis for hazardous contaminants, there should be no problem in neutralization and disposal of these materials.

The tower and all storage tanks, being within the 750-foot building limit, must be demolished in any event. The Company maintains that all materials stored in tanks (except for the neutral acid sludge) is marketable and will be removed prior to the property being turned over to the Airport. On this premise, sampling and analysis of the tank contents should be a condition of the title transfer, to verify that

the tanks have been decontaminated adequately for conventional dismantling and off-site disposal. Also, soil in the tank areas must be sampled for contamination by chemical spillage.

Drums and Containers

Conservation Chemical Co. acknowledged the presence of about 300 drums on the site, including a few drums of ferric chloride product. The hazardous waste permit application of November 18, 1980 indicates 100,000 gallon total storage capacity for containers and notes that they planned to receive less than truckload quantities of hazardous materials in drums and accumulate some of them at the plant until a truckload quantity of compatible material could be assembled for shipment to an approved landfill. The Company also disclosed plans in some cases to de-drum and store hazardous waste materials in bulk until truckload quantities are accumulated for transportation to an approved treatment facility.

The EPA inspection on November 19, 1980 found drums at several locations on the site besides the designated main drum storage area, and noted some drums as being empty or "mostly empty". Our visual inspections in December, 1982, (carried out with the cooperation of the plant manager) found drums at essentially the same locations. The Main Drum Storage Area and two other areas northwest of the railroad spur have large numbers of drums, as noted on Figure 2. Many drums appeared to be empty or to contain only rainwater. Some of the metal drums were badly rusted or broken; in some drums the plastic liners were also broken. Labels on the drums were checked, particularly those with hand

lettering that suggested reuse involving a hazardous material after the original contents had been consumed.

Our inspection found 35 "Recovery Drums" scattered about 6 different locations on the site. These distinctive yellow metal drums are marketed specifically as containers for damaged or leaking drums or spilled materials. The plant manager indicated that most of these held contaminated soil removed from the site after a solvent spill. Two of the three open Recovery Drums were seen to hold some soil. Disposal of the Recovery Drums will require determination of present solvent content.

Our inspection also revealed two drums containing chemistry laboratory reagent bottles, which could be seen through the severely rusted metal. Many of the visible reagent bottles contained solid residues. Disposal of these and other similar drums will require time consuming manual classification according to apparent hazard class.

Conservation Chemical Co. maintains that it will arrange for reclamation or proper disposal of all drums on the site prior to title transfer. On this premise, extensive sampling and analysis of materials stored in the drums would only be necessary if the Company is unable to fulfill their plan.

Soil at the drum storage areas noted on Figure 2, particularly near drums suspected of containing hazardous waste material, should be tested for contamination and removed if there is potential for leaching hazardous materials into the groundwater.

Structures

The pits marked in Figure 2 are usually filled with water. The southern pit, which is adjacent to the pie-shaped basin, has top elevation 592.0 feet and must be at least partially demolished for grading. The northern pit serves as the sump for drainage of the entire process area between the office/shop building and the railroad embankment. Neither of these pits showed a noticeable accumulation of oil during our site inspections and other on-site activities.

Under adverse circumstances the pits could concentrate contamination from surface water runoff or seepage leaking into them, and subsequently release the contamination under severe storm runoff conditions. Water collected in the pits should be sampled and analyzed for hazardous pollutants, as a check on present contamination of surface water and ground water. Both pits should be demolished and filled with clean soil, since they would present a safety hazard for Airport personnel quite independent of hazardous waste material exposure.

The office/shop building and other minor structures, including a roofed former loading area near the northern pit and a storage shed for scrap iron will be demolished, as necessary for compliance with the building limit. Soil borings should be taken near the pits and other structures, to check for contamination due to chemical spills.

IDENTIFICATION OF OTHER HAZARDOUS WASTE PROBLEMS

Contamination of soil and the resultant present and future contamination of ground water and surface water runoff must be considered, in addition to the site preparation activities necessitated by hazardous waste materials discussed previously. Because of the limited potential for worker or resident exposure to toxic hazards and the apparent absence of drinking water wells in the vicinity using the shallow groundwater aquifer, the principal concern is for contamination reaching the Grand Calumet River and/or Lake Michigan, the latter being the principal water supply for Gary and the northwestern Indiana - northeastern Illinois metropolitan area.

Soil Contamination

Conservation Chemical Co. has acknowledged soil contamination on the site. Pursuant to Agreed Findings of Facts and an Agreed Recommended Order adopted by the Stream Pollution Control Board of the State of Indiana on March 23, 1973, the Company agreed to cease and desist from "placing treated or untreated chemical wastes on the land," particularly in the diked areas around the large storage tanks.

The company presently monitors pH when ponding of surface water occurs in an area northwest of the bisecting railroad spur, between the pie-shaped basin and Tank 19 (See Figure 2.), and pours soda ash powder on, as necessary to neutralize excessive acidity. Insitu neutralization with lime or limestone will be required for the acid soil, but the extent and degree of acid contamination has not been determined. The company delayed granting permission for soil sampling needed to define

this until after completion of field activities for this study.

Soil contamination elsewhere on the site is a definite possibility. The most likely areas are in the vicinity of process units and tanks that have contained hazardous materials and drums suspected of containing hazardous materials, as indicated previously. Soil in the path of the taxiway extension must be tested for acidity and other chemical contamination which would require off-site disposal as a hazardous material for any such soil removed for grading.

Surface Water Contamination

Runoff of surface water containing oily material has been noted in an airport drainage ditch adjacent to the railroad embankment that forms the southeastern property line between the Airport and Conservation Chemical Co. It has been speculated that this may originate on the project site, but definitive information is lacking.

Conservation Chemical Co. acknowledges excessive acidity in ponded surface water in the area to the south of Tank 19, as noted previously under soil contamination. The company presently neutralizes the surface water by pouring on soda ash powder.

Groundwater Contamination

Some degree of groundwater contamination from past and present activities at the Conservation Chemical Co. site is likely, but it remains to be determined whether this is significant. The shallow groundwater aquifer (the Calumet aquifer) is not a significant water resource, and there are no known residential wells using it in the

plant vicinity. However, groundwater contaminant migration may release hazardous materials into the Grand Calumet River or Lake Michigan (1).

Groundwater monitoring wells were placed outside the site but near the property lines, as shown on Figure 2. Two wells are located on airport property, directly across the railroad embankment from the southern and eastern apex points of the triangular property. Two wells on the western side of the site are located on Elgin, Joliet and Eastern Railroad right-of-way. The railroad's letter granting permission for the soil boring and subsequent groundwater monitoring is included in the Appendix. (Permission was also requested of Conservation Chemical Co. and adjacent property owners for such wells on their property, but was not granted.) The water table at the western wells was encountered below apparently oil saturated soil. The ground water at the eastern and southern wells was yellowish and turbid, indicating probable contamination.

Analysis of the groundwater samples, as summarized in Tables 3 and 4, showed detectable concentrations of volatile chlorinated organic solvents, cyanides, phenols and heavy metals. Comparison of concentrations observed at the east side wells in March 1983 (Table 3) and in June 1983 (Table 4) shows some decrease in contamination over the months between sampling. Groundwater on the western side of the site, as seen in Table 4, is more contaminated than on the eastern side, with generally higher concentrations and a larger number of priority pollutants detected.

TABLE 3
RESULTS OF INITIAL GROUND WATER SAMPLING
March 4, 1983

	<u>Well Locations</u> ^{a)}		<u>Comparison Criteria</u>	
	<u>Eastern</u>	<u>Southern</u>	<u>Detection Limit</u>	<u>Drinking Water Standard</u>
Volatile Organics				
Methylene chloride, ug/l	14	N/D	10	--b)
Acid Extractable Organics	N/D ^{c)}	N/D	25-250	var ^{d)}
Base-Neutral Extract Organics	N/D	N/D	10-25	var
Pesticides/PCB's	N/D	N/D	10	var
Inorganic				
Cyanides, mg/l	.01	N/D	.01	.01
Phenols, mg/l ^{e)}	.31	N/D	.01	.001
Heavy Metals				
Zinc, mg/l	.24	.23	.02	5.0

- a) East side of site only; Refer to Figure 2
- b) No applicable standard
- c) Below detection limit
- d) Varies for different contaminants
- e) Other heavy metals (Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver and Thallium) were below their detection limit.

Note: See Appendix for details on methods of chemical analysis.

TABLE 4
RESULTS OF GROUNDWATER MONITORING
June 27, 1983

	<u>Well Locations (See Figure 2)</u>			
	<u>West Side of Site</u>		<u>East Side of Site</u>	
	<u>Northwest</u>	<u>Southwest</u>	<u>Eastern</u>	<u>Southern</u>
Surface Elevation	593.7	594.2	589.7	591.0
Water Level at Sampling	586.9	586.6	584.8	584.0
Sample Characteristics	base- reactive (white)	acid- reactive (black)	yellow and turbid	yellow, turbid, foul odor

HAZARDOUS MATERIAL CONCENTRATIONS

Volatile Organics, ug/l				
Benzene	35	N/D ^{a)}	N/D	N/D
1,1-Dichloroethane	24	36	N/D	N/D
1,2-Dichloroethane	1,600	200	N/D ^{b)}	N/D
Methylene chloride	N/D	45	N/D	N/D
Vinyl chloride	12	10	11	N/D
Acid Extractable Organics	N/D	N/D	N/D	N/D
Base/Neutral Extractable Organics ug/l				
Isophorone	38	24	N/D	N/D
Pesticides/PCBs	N/D	N/D	N/D	N/D
Inorganics, mg/l ^{c)}				
Arsenic	N/D	.2	N/D	N/D
Beryllium	N/D	.02	N/D	N/D
Cadmium	N/D	.06	N/D	N/D
Chromium	.10	N/D	N/D	N/D
Copper	N/D	.2	N/D	N/D
Mercury	.0008	.003	.002 ^{d)}	.0004 ^{d)}
Nickel	1.1	.9	N/D	N/D
Silver	N/D	.2	N/D	N/D
Thallium	N/D	.6	N/D	N/D
Zinc	N/D	.2	N/D ^{e)}	N/D ^{c)}
Cyanide	.15	.5	N/D ^{f)}	N/D
Phenols	.05	.28	.028 ^{g)}	.06 ^{d)}

a) Below detection limit.

b) Detected at 14 ug/l in initial sampling (Table 3).

c) Antimony, Lead and Selenium not detected in any sample tested.

d) Not detected in initial sampling (Table 3).

e) Detected at .23-.24 mg/l in initial sampling. (Table 3)

f) Detected at .9 mg/l in initial sampling. (Table 3)

g) Detected at .31 mg/l in initial sampling. (Table 3)

Note: See Appendix for details on methods of chemical analysis.

Observations of groundwater levels noted in Table 4 indicate an apparently significant west to east gradient as well as the expected north to south down-gradient direction for ground water flow (toward the Grand Calumet River) on both sides of the Conservation Chemical Co. property. Additional observations at these and other wells on adjacent property are needed to establish definitive directions for groundwater flow. Pending those results, it would be premature to speculate as to whether the groundwater contamination does or does not originate on the site.

However, it is definite that groundwater on the Conservation Chemical Co. site has been contaminated with oily material, at least at the oily seepage location designated on Figure 2. A backhoe pit excavated by the Company in February, 1983 to a 5.5-foot depth (elevation 586±) filled with oily seepage and had a thick surface layer of oily material when sampled. (Conservation Chemical Co. verbally granted permission for this sampling.) Subsequent chemical analyses showed no detectable quantities of either pesticides or PCB's. The report from the testing laboratory is appended.

It remains to be evaluated whether this oily seepage is related to fuel oil leakage losses from Tank 19 mentioned by the company, or the oil saturated soil encountered in boring the western wells near Tank 19 or to oily seepage observed due east of the pit (apparently through an outcrop in the eastern side of the railroad embankment), into a drainage ditch on airport property which eventually discharges into the

Grand Calumet River. The source and extent of the oil contamination cannot be assessed without additional test pits or soil boring.

Groundwater contamination due to leaching of hazardous materials from abandoned piping is possible. There may be buried pipes from the refinery virtually anywhere on the site, as has been our experience elsewhere at similar facilities. Electromagnetic instrumentation (magnetometers or eddy current) could be used for a surface (remote sensing) survey mapping of the buried piping system. However, it is not recommended to undertake such a survey unless actual leakage occurs affecting groundwater or surface water.

REMEDIAL ACTIONS

Remedial actions to alleviate hazardous waste problems at the Conservation Chemical Co. property were considered, including excavation, dredging, landfill disposal, chemical fixation, insitu treatments, gas migration controls, groundwater control and surface sealing. The discussion of remedial actions in the following paragraphs is organized according to locations and types of problems.

Cost Estimate

Preliminary cost estimates were developed following the general methodology presented in the EPA Remedial Action Handbook (2) and within the limitations and uncertainties of available data. Table 5 summarizes the results for both best case and worst case conditions. The total of costs for remedial actions at the Conservation Chemical

TABLE 5

SUMMARY OF COST ESTIMATES FOR
HAZARDOUS WASTE REMEDIAL ACTIONS AT
CONSERVATION CHEMICAL COMPANY

	<u>BEST</u> <u>CASE</u>	<u>WORST</u> <u>CASE</u>
<u>Pie-Shaped Basin</u>		
Removal of 4,500 to 9,000 cubic yards	\$ 25,000	\$ 50,000
Solidification and Landfill Disposal	360,000	1,575,000
Alternatives:		
Lime/Fly Ash Solidification and		
100-140 mile haul @ \$110-175/CY,		
or		
Chemical Inactivation ^{a)}		
and 30 mile haul @ 80-105/CY		
Backfill, 0 to 4,500 cubic yards	0	115,000
@ \$20-25/CY		
Subtotal	<u>\$385,000</u>	<u>\$1,740,000</u>
 <u>Acid Soil Zone</u>		
Neutralization of 5,000 to 20,000 sq. ft.		
at 50 to 500 lb lime/1,000 sq. ft.	\$ 100	\$ 500
 <u>Oil Contaminated Groundwater</u>		
Alternatives:	\$ 25,000	\$ 775,000
Collection Well @ 25,000,		
or		
Removal of 1,000-9000 cubic yards,		
landfill disposal and replacement		
@ 85/CY		
Tank Dismantling (Tank 19)	<u>25,000</u>	<u>25,000</u>
Subtotal	\$ 50,000	\$ 800,000
 <u>Neutral Acid Sludge (Tank 20)</u>		
Removal of 2,100 cubic yards,	\$ 20,000	\$ 20,000
Tank Dismantling and		
Solidification and Landfill	20,000	20,000
Disposal @ \$75-100/CY ^{a)}	<u>160,000</u>	<u>210,000</u>
Subtotal	\$200,000	\$ 250,000

TABLE 5 (CONTINUED)

SUMMARY OF COST ESTIMATES FOR
HAZARDOUS WASTE REMEDIAL ACTIONS AT
CONSERVATION CHEMICAL COMPANY

	<u>BEST</u> <u>CASE</u>	<u>WORST</u> <u>CASE</u>
<u>Additional Areas of Contaminated Soil</u>		
Removal of 0 to 34,000 cubic yards landfill disposal and replacement @ \$85/CY	\$ 0	\$2,900,000
<u>Dismantling and Decontamination of Other Tanks</u>	\$ 0	\$ 450,000
a) Chemical Inactivation acceptable only if demonstrated to render the basin solids non-hazardous.		
<u>Subtotals</u>		
Pie-shaped basin	\$385,000	\$1,740,000
Acid soil zone	100	500
Oil contaminated groundwater	50,000	800,000
Neutral acid sludge (Tank 20)	200,000	250,000
Additional areas of contaminated soil	0	2,900,000
Dismantling and decontamination of other tanks	<u>0</u>	<u>450,000</u>
TOTAL (rounded)	\$640,000	\$6,900,000

Co. site is seen to range from \$640,000 if all uncertainties follow the best case outcome to \$6,900,000 for all worst case outcomes.

Pie-Shaped Basin

Grading for the runway extension will require removal of material from the pie-shaped basin, at least to a depth of about six feet overall (sea level elevation 589 feet), which will displace at least 4,500 cubic yards of waste solid material containing heavy metals, cyanides and phenols. Larger quantities, as much as 4,500 additional cubic yards, may have to be displaced to insure that all hazardous waste materials and the (currently unknown) sources of eruptions are removed. The estimates for removal and disposal reflect anticipated difficulties in handling the basin solids.

Removal by bulk excavation is costed for use of dragline shovels and end loaders. Hydraulic dredging may be necessary as a costlier removal alternative if the solids consistency is too thin for excavation.

Two alternatives are presented for disposal of the basin solids: either off-site landfilling at a facility certified to accept this type of waste material or chemical inactivation (fixation) of the hazardous constituents, which makes on-site disposal or more convenient off-site disposal feasible. Both of these alternatives involve addition of a bulking or solidifying material. The cost estimates use conservative assumptions for the dosage, which can only be guessed until bench scale testing before or during the site work. Lime and flyash or other waste

material would be used only to stabilize the basin solids and eliminate free liquid as necessary for hauling, which is anticipated to increase the tonnage hauled by 50% to 100%. The nearest landfill sites certified to accept waste material containing significant leachable chromium are 100 to 140 mile hauls. Accordingly, chemical fixation using silicates seems attractive for savings of haul costs despite higher treatment costs, provided that favorable experience elsewhere with rendering similar waste materials non-hazardous can be repeated here and verified in bench scale tests on pie-basin solids.

Control of the eruptions is an additional objective for remedial action at the pie-basin. In principle, venting of the gases could be an acceptable alternative to uncovering and removing the currently unknown source of eruption gases. However, providing the required gas interception trenches, vent piping and blowers for the 20,000 square foot basin is estimated to cost about \$500,000 initially, plus ongoing additional costs for operation and maintenance (for example, costs for flaring of flammable gases or treatment for toxic gases). It seems preferable to excavate deep enough in the basin to uncover and remove the sources of eruption.

Backfill will be needed for excavation below the six-foot depth. Displaced soil would have to be tested for EP toxicity before it could be returned as backfill. Inactivated basin solids, if nontoxic, could also serve as backfill.

Acid Soil Zone

The extent of the acid soil zone north of the pie-basin and the concentration of residual acidity are not known, pending soil sampling and analysis. Provided that the analyses do not reveal additional hazardous materials present there, insitu treatment by addition of lime or limestone is an inexpensive and effective remedial action. The cost estimate conservatively assumes that the affected zone may reach almost to Tank 19 and cover as much as 20,000 square feet.

Taxiway

Remedial action at the taxiway extension would be needed only if the soil analysis and/or groundwater monitoring show significant contamination. The cost estimate is for the worst case anticipated, requiring removal to a depth of six feet for a 75 foot wide swath, and hauling for off-site disposal. The clearing and grading for the taxiway extension will also involve dismantling and/or demolition of Tanks 19 and 20, which are discussed separately in the following sections.

Tank 20 (Neutral Acid Sludge)

Some 2,300 cubic yards of neutral acid sludge solids contained in Tank 20 must be removed for disposal. This material is anticipated to be very much like the pie-basin solids; whatever is done for them will also be done for the neutral acid sludge. The cost estimate includes

partial dismantling of the tank roof to provide access for removal of the sludge with a clamshell shovel.

Oil Contaminated Groundwater

Leakage of fuel oil from Tank 19 is suspected as the source of oil contamination discovered at a test pit dug in February, 1983, which may affect an area reaching westward toward the monitoring wells on that side of the property and eastward across the oily seepage pit to the railroad embankment. The oil would float at the top of the water table, but would be swept along by high flows.

The extent of the oil plume is unknown, as is the concentration of oil. The cost estimate assumes as a worst case removal of a swath, about 25 wide as Tank 19, and demolition or dismantling of the tank as required for the taxiway grading.

Some removal of soil overlying the suspected oil plume is anticipated to achieve the desired grading and surface water drainage. Disposal of this soil by landfilling would be required, if soil sampling and analysis or groundwater monitoring shows the presence of new hazardous materials. The cost estimate includes a lower cost alternative enlarging the existing pit into a collection well for treatment to remove hazardous constituents, and pumping the treated groundwater for further treatment and disposal via Gary Sanitary District facilities.

Additional Areas of Contaminated Soil

The estimate includes as a contingency the possibility that additional areas of contaminated soil are present on the site. In the worst case outcome, all soil not handled for other remedial actions may have to be removed for disposal at a secure landfill and replaced with clean fill soil.

Other Tanks

The estimate anticipates that Conservation Chemical Co. will have completed removal of marketable "materials in process" from tanks and hauled all drums away for off-site disposal. The remaining tanks would have to be decontaminated before dismantling and disposal/salvage.

RECOMMENDATIONS

Remedial action on the part of the Gary Municipal Airport Authority will be delayed, pending acquisition of the property and resolution of the uncertainties discussed in the preceding section. Initial actions are recommended below, together with recommendations for a sampling program to define the extent of additional remedial actions.

Initial Remedial Actions

1. Solids contained in the pie-shaped basin are mechanically unsuitable for the runway and taxiway extension and should be removed to a depth of at least 6 feet. The gas sampling and analysis recommended below should be carried out before any excavation activities, to define the hazards associated with gas eruptions. During the removal, solid materials will have to be collected in Removal Drums and stored, pending, verification of the initial limited sampling for hazardous components, and results of chemical fixation tests.

2. "Neutral acid sludge" in Tank 20 is similar to the pie basin solids and should be removed for ultimate disposal together with the pie basin solids.
3. Contamination of ground water by oil seepage is acknowledged from a leak in Tank 19, and, there may be other sources. Tank 19 should be emptied and abandoned at the earliest practicable date. In any event, oil collection equipment should be installed at the existing seepage pit, and recovery or disposal arranged.

Sampling and Analysis

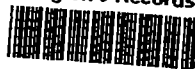
1. Monitoring gas emissions from eruptions on the pre-shaped basin and, if possible, identification of the source material.
2. Sampling of acid contaminated soil, to guide the choice of removal versus insitu neutralization for remedial action.
3. Soil sampling elsewhere on the property, particularly in the vicinity of process units, tanks and drum storage areas, to define the extent and severity of contamination and evaluate potential for future contamination of surface water and ground water.
4. Ground water monitoring using the existing wells and new wells within the site boundaries to determine whether the ground water contamination already noted originates on the Conservation Chemical Co. site.
5. Inspection of tanks, process units and drums and sampling of stored material, to assess potential salvage and recovery versus disposal.
6. Bench or pilot scale testing of chemical fixation for the pie basin solids and the "neutral acid sludge" in Tank 20, to guide the selection of ultimate disposal methods for these materials.

REFERENCES

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2. "Remedial Action at Waste Disposal Sites" U.S. Environmental Protection Agency, Technology Transfer Handbook, EPA 625/6-82-006, June 1982.

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EPA Region 5 Records Ctr.



224902

PRELIMINARY SAMPLING INVESTIGATION
OF
CONSERVATION CHEMICAL
GARY, INDIANA

TDD R05-8404-05

PREPARED BY: Heidi Smith
SUBMITTED TO: Don Josif
DATE: May 14, 1984

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APPENDIX A

SECTION 1 - INTRODUCTION

The United States Environmental Protection Agency (U.S. EPA) Region V requested the Field Investigative Team (FIT) to conduct a hydrogeologic investigation of Conservation Chemical Company, Gary, Indiana. Pursuant to Technical Directive Document (TDD) R05-8307-01, drilling specifications were completed, monitoring wells were installed, groundwater samples were collected and analyzed. In addition, survey work was performed and a report was to be written and submitted to the U.S. EPA. Results of this investigation, would provide documented evidence toward establishing whether enforcement response at this facility would be necessary.

Although the General Task Description for TDD R05-8307-01 was to conduct a full hydrogeologic study of Conservation Chemical, U.S. EPA contact Jim Pankanin in consultation with Ecology and Environment hydrogeologist Ron St. John deemed a full hydrogeologic investigation unnecessary. As a result, only a preliminary investigation was conducted to provide data to aid in the Hazardous Ranking System (HRS) scoring of the facility. With the reduced scope of work, a formal report of activities and results was not prepared under TDD R05-8307-01.

The following report was prepared under TDD R05-8404-05. This formal report was deemed appropriate at this time to answer questions which have arisen on the extent of FIT activities at the facility.

SECTION 2 - GENERAL BACKGROUND

2.1 SITE DESCRIPTION

Conservation Chemical Company is located at 6500 Industrial Highway (U.S. Route 12) in Lake County, Gary, Indiana. The Conservation Chemical property is a triangular, 4.1-acre parcel just northwest of the Gary Municipal Airport boundaries. The Elgin, Joliet and Eastern Railroad right-of-ways bound the property on two sides (see Plate 1).

Conservation Chemical began operations in 1967. Prior to that time, the Conservation Chemical site and adjoining parcels were the site of Berry Oil Company Petroleum Refinery. Tanks, drums and other containments left on-site by Berry Oil have been utilized by Conservation Chemical. In addition to petroleum refineries, the immediate area is heavily industrialized, predominantly with steel mills, to the north and west.

The basic activity of Conservation Chemical Company is the conversion of industrial wastes into forms which are acceptable for disposal or reuse. The site stores and treats spent acid, oil and solvents and produces ferric chloride. To produce the ferric chloride, Conservation Chemical generally treats ferrous chloride pickle liquor from steel mills with chlorine gas which is brought in by railroad tank cars.

Scrap is also added to increase the concentration of ferric chloride or to remove the free acidity by conversion to the iron salts. Due to the irregularity and variety of incoming materials, a wide range of processes and treatment techniques are required to effectively handle these materials.

2.2 TOPOGRAPHY AND SURFACE WATER

The site topography is relatively flat ranging from an elevation of 595 feet in the southern "pie basin" to 590 feet along the north-east boundary. The surrounding surface water drainage is southward toward the Grand Calumet River; however, because of the on-site railroad embankments, drainage on the project site is northward (Havens

and Emerson, 1983). It is unlikely that on-site contaminated surface water would drain into the Grand Calumet River.

2.3 GEOLOGY

As the topography section mentions, the site is relatively flat with dunes and beach ridges which denote the Calumet lacustrine plain. Approximately 150 feet of unconsolidated glacial deposits lie above the bedrock. The upper unit of this deposit is the Atherton Formation consisting of fine to medium silty sand with interbedded beach gravel, silt and clay. The upper 50 feet of the Atherton Formation is Wisconsinan glaciolacustrine sand and gravel in the form of bars, spits, beach ridges and dunes (Havens and Emerson, 1983).

The underlying bedrock consists of closely jointed Niagaran dolomites and cherty limestones of the middle Silurian. The bedrock dips southeastward at five to seven feet per mile into a westward-extending arm of the Michigan basin (Havens and Emerson, 1983).

2.4 SOIL

The original soil in the site area was classified as the Oakville-Tawas complex. The composition of this soil is roughly 45% Oakville fine sand, 45% Tawas muck, and 10% Maumee loamy fine sand and gently sloping Oakville sand. The hydraulic conductivities range from 4.4×10^{-4} to 1.4×10^{-3} cm/sec in the muck to greater than 1.4×10^{-2} cm/sec in the fine sand (USDA, 1972). These high permeabilities yield a high potential for groundwater contamination. The near surface soil profile may have been disturbed by construction activities on the site.

SECTION 3 - PREVIOUS INVESTIGATIONS

As previously noted, the area around Conservation Chemical Company is and was heavily industrialized; as a result, the subject facility and other industrial concerns have been the focus of governmental and private investigations. Ecology and Environment conducted an initial hydrologic investigation and soil sampling in April 1982, with a follow-up site survey in June 1982 prior to initiation of this project.

The Indiana State Board of Health, Stream Pollution Control Board and the Indiana Department of Conservation, Division of Water Resources and the U.S. EPA have been monitoring and investigating activities of Conservation Chemical since 1972. In one specific instance, the Indiana State Board of Health investigated a solvent discharge which occurred on December 22, 1981. Their investigation included sampling the pooled liquid and monitoring the cleanup.

In August 1983, an extensive study of Conservation Chemical conducted by Havens and Emerson, Incorporated, consulting engineers, for the Gary Municipal Airport Authority in relation to possible acquisition of the facility as part of an airport development project. The study involved the identification of on-site hazardous materials, the determination of soil and groundwater contamination and an estimation of the costs required to cleanup the site. The major consensus of these investigations verifies that hazardous wastes are present on-site and the groundwater and on-site soil has been affected.

Ecology and Environment conducted a population survey of groundwater usage in the vicinity of the Midco II site to the east of Conservation Chemical (Lunsford, 1984). The information from the population survey was useful in the preparation of the HRS score since Conservation Chemical is within one (1) mile of Midco II.

SECTION 4 - ECOLOGY AND ENVIRONMENT INVESTIGATIVE TECHNIQUES

In July 1981, Ecology and Environment was given the task of drilling, installing, and sampling monitoring wells at Conservation Chemical pursuant to TDD R5-8307-01. On October 7-10, 1983, three sets of monitoring wells were installed on site (C1 and C2, C3 and C4, C5 and C6). Plate 1 indicates the locations of the well nests. Wells C1, C3 and C5 were deep wells set at depths of 41 feet, 40 feet and 25 feet respectively. The shallow wells, C2, C4 and C6, were set at 12 feet, 15 feet and 15 feet. The bore holes were advanced by a hollow stem auger to the desired depth. Soil samples were taken by split spoon sampling techniques during the advancement of the holes. The monitoring wells were constructed with flush threaded, 2-inch inside diameter (I.D.) galvanized pipe with a 2-inch I.D. 10 slot stainless steel well screen. The wells were grouted with a cement mixture. A steel protector casing and lock were also installed on each well.

The well logs for these monitoring wells are presented in Appendix A. Monitoring well C2, with a top-of-casing measurement of 100 feet, served as the reference well depth. The well logs note a tan, well sorted, fine to medium grain sand. Black oily sand was detected in monitoring wells C1 and C5 at approximately 24 to 25 feet, and a water-oil mixture was found at a 7-foot depth in well C2. The oily sand may be a resultant of Berry Oil's previous operations, a nearby industry, or a more recent incident related to Conservation Chemical. Water levels in the wells were measured October 18, 1983 and are presented in Table 1.

TABLE 1: WATER ELEVATIONS OF MONITORING WELLS AT
CONSERVATION CHEMICAL, GARY INDIANA

WELL	GROUND ELEVATION (Ft)	TOP OF CASING (Ft)	DEPTH TO WATER TABLE (Ft)	ELEVATION OF WATER TABLE (Ft)
C1	97.49	100.31	7.06	90.43
C2	97.56	100.00	6.54	91.02
C3	98.05	101.60	6.78	91.27
C4	97.84	99.58	6.57	91.27
C5	97.56	100.50	7.66	89.90
C6	97.39	99.76	7.45	89.94

U.S. EPA protocol was observed for the monitoring well surface water and sediment samples. Two sediment samples were taken just off site; one upgradient to the northeast (SED 1) and the other downgradient to the southwest (SED 2). In addition, a surface water sample, SW-1, was taken in wetlands near the Sediment 1 (SED 1) sample (see Plate 1 for locations). The samples were collected in November 1983 and were analyzed for volatiles, organics, inorganics, and pesticides.

SECTION 5 - ANALYTICAL RESULTS

The organic analyses of the samples are presented in Table 2. The non-priority pollutant hazardous acid compounds, 2-methylphenol and 4-methylphenol, and the base neutral compound bis(2-chloroethyl) ether, were detected in monitoring well C2. Isophorone was found at significant concentrations in wells C5 and C6. Well C2, the duplicate sample of C2, and the surface water sample, indicated the presence of the pesticide 4,4-DDD. Additional acid and base neutral fraction compounds were detected at non-quantifiable trace concentrations.

Two of the volatile compounds, acetone and methylene chloride, may be partially attributed to laboratory contamination, but their high concentrations are indicative of actual water contamination, not laboratory contaminations. The list of volatile fraction chemicals in Tables 3 and 4 are generally halogenated and non-halogenated solvents. Wells C5 and C6 have the greatest volatile fraction concentrations. Wells C1 and C2 are less contaminated, and wells C3 and C4 are the least contaminated.

The tentatively identified compounds and their analyses are given in Table 4. The concentrations listed are those with a computer fit greater than or equal to 90%. Monitoring well C6 has the greatest number of tentatively identified compounds. The sediment 1 (SED 1) sample reported large quantities of cyclohexane methyl, cyclohexane 1,1,3-trimethyl, 3-methyl hexane and pentane, 2,3-dimethyl.

The results of the inorganic analysis of the sediment, surface water, and monitoring well samples are presented in Table 5. The concentrations of aluminum, chromium, cobalt, copper, iron, lead, manganese, and zinc were exceptionally high and cannot be attributed to background conditions.

SECTION 6 - DISCUSSION

Possible groundwater contamination at Conservation Chemical is more of an eminent threat than surface water contamination. The surface water movement on-site is northward, therefore, the Grand Calumet River is protected from direct contamination. The groundwater, however, is directly susceptible to contamination due to its high water table and permeable sandy soils. The groundwater flow at the site is generally to the south-southwest towards the Grand Calumet as seen in Plate 1. A more accurate groundwater flow pattern could be generated with additional wells. A general hydraulic gradient can be calculated for the groundwater flow from the available wells. The hydraulic gradient (i) is equal to the change in the water level between two wells (dh) divided by the horizontal distance between the two wells (dl) or $i = dh/dl$. The general gradient for this site is approximately 0.003.

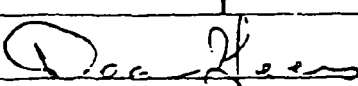
Well nests C1 and C2, and C5 and C6 indicate the presence of a head difference between the shallow and deep well at each location, which would indicate that downward contamination may occur. The presence of oil-like material at depth substantiates this fact.

As the sample analyses indicate, the groundwater at both shallow and deep levels is contaminated. Nine of the 14 elements analyzed as constituents of the U.S. EPA Drinking Water Standards exceeded those standards. The Conservation Chemical Company handles organics, oils, solvents, and various acids. The volatile fraction chemicals (Tables 3 and 4) are mainly solvents being associated with such uses as solvent recovery, petroleum refining, and organic chemical manufacturing. Because of their varied and irregular incoming materials and processes, a wide range of materials at varying quantities pass through Conservation Chemical. The sandy soils are very

A SPC INSPECTION FIELD SHEET

(To be completed if SPC Regulation is applicable to Facility - see 40CFR Part 112.1.)

INSTRUMENT
ON SITE

1. NAME OF FACILITY Conservation Chemical Co.		10. TYPE OF FACILITY Chemical Manufact.
12. FACILITY LOCATION 6500 W. Industrial Hwy.		11. TELEPHONE NUMBER Area Code (219) 949-8229
13. NAME OF OWNER AND/OR OPERATOR RESPONSIBLE FOR FACILITY Norman Hjersted		12. MAILING ADDRESS P.O. Box 6066 Garv, IN 46406
14. TYPES OF OIL STORED AND CAPACITY OF ABOVEGROUND AND BURIED STORAGE. See Attached List		
15. IS A CERTIFIED SPC PLAN AVAILABLE FOR INSPECTION? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		16. DATE OF INSPECTION 5-10-84
17. NAME AND REGISTRATION NUMBER OF CERTIFYING ENGINEER <input type="checkbox"/> NOT AVAILABLE		18. DATE SPC PLAN WAS CERTIFIED <input checked="" type="checkbox"/> NOT AVAILABLE
19. IS SPC PLAN FULLY IMPLEMENTED? (Are the items called for in the Plan in the interest of spill prevention actually being followed - if otherwise) <input checked="" type="checkbox"/> NOT APPLICABLE		
20. NAME OF WATER BODY THAT POTENTIAL SPILL COULD ENTER, OR IF UNNAMED TRIBUTARY, THEN FIRST NAMED WATERED DOWNSTREAM (if known) Little Calumet River		
21. COMMENTS (Include comments by owner/operator - write on back or attach extra sheets if needed) History of Site: 1967 was purchased by N. Hjersted. 1967-1975 Ferric Chloride Production. 1975 Ceased production became a hazardous waste terminal. 1980 Regulations forced them to stop transport of hazardous wastes. 1980 - Present - Redesigned plant and restarted pickle liquor operation - producing ferric chloride. Present Operation uses pickle liquor, iron, water and chloride to produce ferric chloride. Ferric chloride used in water treatment.		
22. SPC NO.	23. CASE NO.	24. NPDES NO. <input type="checkbox"/> NOT AVAILABLE
25. INSPECTOR (signature) 		26. DATE 5/11/84
27. INSPECTOR (print) Dean Geers		

1 COMMENTS

- Only tanks that are locked are the solvent tanks. Mr. Poisel has just purchased locks for remaining tanks.
- Dike around tank #22 is in poor shape - one spot near back corner eroded away to about 1ft.
 - a pipe goes through dike in back corner (NW), is bent up about 2ft. inside of dike.
 - gauge on tank is broken - levels were checked last year by using metered tape.
- Basin (diked area) around tank #19 completely filled with waste water from production.
 - overflow from this area goes down to tank #22.
 - overflow can also go across R.R. tracks to another basin prior to swamp.
 - a lot of oil sludge material floating on surface of water and washed up along edges.
 - Next to this basin area was an area where a tar like oil is oozing out of the ground.
 - According to Mr. Poisel there are several places on the property where oil oozes out of the ground when the temperature rises. When digging down there appears to be about a 1-2 inch thick layer of oil 4-5 ft down.
- Pie Shaped Basin - is about 10 ft. deep - was used as an area to pump neutralized sludges.
 - the neutralized sludges are believed to overlies petroleum sludges.
 - when borings were taken of this area an oil slick was observed within 4 ft. of surface.
- Old separator pit - (concrete pit) is full of water - next to tank #20. This pit will eventually be used as part secondary containment for tank #20 and 3 other solvent tanks. Presently no containment for these tanks.
- Tub (DU-1) with about 2000 G of oil setting near cyanide tank farm - no diking around any tanks on the tub.
- About 150 drums setting on pallets labeled as hazardous wastes.
 - 32 contain soils from solvent spill.
 - Others contain
 - Lapping Oil
 - Copper salt material
 - Solidified Resins
- Tank #16 used to neutralize acids.
- Septic system empties into a catch basin between drum storage area and cyanide tank farm.
 - this basin has a pump attached at top.
 - water was recently discharged across ground from this basin.

A. SPCC INSPECTION FIELD SHEET

(To be completed if SPCC Regulation is applicable to Facility - see 40CFR Part 112.1.)

INSTRUCTIONS
ON REVERSE

1. NAME OF FACILITY
Conservation Chemical Co.

1b. TYPE OF FACILITY
Chemical Manufact.

1c. FACILITY LOCATION

6500 W. Industrial Hwy.

2. NAME OF OWNER AND/OR OPERATOR RESPONSIBLE FOR FACILITY

Norman Hjersted

3b. TELEPHONE NUMBER
Area Code

(219) 949-8229

3c. MAILING ADDRESS

P.O. Box 6066 Gary, IN 46406

3. TYPES OF OIL STORED AND CAPACITY OF ABOVEGROUND AND BURIED STORAGE.

1

See Attached List

4. IS A CERTIFIED SPCC PLAN AVAILABLE FOR INSPECTION? ☐ YES ☒ NO

5. DATE OF INSPECTION

5-10-84

6. NAME AND REGISTRATION NUMBER OF CERTIFYING ENGINEER ☐ NOT AVAILABLE

7. DATE SPCC PLAN WAS
CERTIFIED ☒ NOT AVAILABLE

8. IS SPCC PLAN FULLY IMPLEMENTED? (Are the items called for in the Plan in the interest of spill prevention actually being done - if checked?)
☒ NOT APPLICABLE

9. NAME OF WATER BODY THAT POTENTIAL SPILL COULD ENTER, OR IF UNNAMED TRIBUTARY, THEN FIRST NAMED WATER BODY
DOWNSTREAM (if known)

Little Calumet River

10. COMMENTS (Include comments by owner/operator - write on back or attach as two sheets if needed)

History of Site:

1967 was purchased by N. Hjersted.

1967-1975 Ferric Chloride Production.

1975 Ceased production became a hazardous waste terminal.

1980 Regulations forced them to stop transport of hazardous wastes.

1980 - Present - Redesigned plant and restarted pickle liquor operation -
producing ferric chloride.

Present Operation uses pickle liquor, iron, water and chloride to produce
ferric chloride. Ferric chloride used in water treatment.

11a. SPCC NO.

11b. CASE NO.

11c. NPDES NO. ☐ NOT AVAILABLE

12a. INSPECTOR (NAME)

Dean Geers

12b. DATE

5/11/84

12c. INSPECTOR (PRINT)

Dean Geers

1. COMMENTS

- Only tanks that are locked are the solvent tanks. Mr. Poisel has just purchased locks for remaining tanks.
- Dike around tank #22 is in poor shape - one spot near back corner eroded away to about 1 ft.
 - a pipe goes through dike in back corner (NW), is bent up about 2 ft. inside of dike.
 - gauge on tank is broken - levels were checked last year by using metered tape.
- Basin (diked area) around tank #19 completely filled with waste water from production.
 - overflow from this area goes down to tank #22.
 - overflow can also go across R.R. tracks to another basin prior to swamp.
 - a lot of oil sludge material floating on surface of water and washed up along edges.
- Next to this basin area was an area where a tar like oil is oozing out of the ground.
 - According to Mr. Poisel there are several places on the property where oil oozes out of the ground when the temperature rises. When digging down there appears to be about a 1-2 inch thick layer of oil 4-5 ft down.
- Pie Shaped Basin - is about 10 ft. deep - was used as an area to pump neutralized sludges.
 - the neutralized sludges are believed to overlie petroleum sludges.
 - when borings were taken of this area an oil slick was observed within 4 ft. of surface.
- Old separator pit - (concrete pit) is full of water - next to tank #20. This pit will eventually be used as part secondary containment for tank #20 and 3 other solvent tanks. Presently no containment for these tanks.
- Tub (DU-1) with about 2000 G of oil setting near cyanide tank farm - no diking around any tanks on the tub.
- About 150 drums setting on pallets labeled as hazardous wastes.
 - 32 contain soils from solvent spill.
 - Others contain
 - Lapping Oil
 - Copper salt material
 - Solidified Resins
- Tank #16 used to neutralize acids.
- Septic system empties into a catch basin between drum storage area and cyanide tank farm.
 - this basin has a pump attached at top.
 - water was recently discharged across ground from this basin.

TABLE 3: SUMMARY OF THE ORGANIC RESULTS FROM THE ANALYSIS OF THE VOLATILE FRACTION IN SEDIMENT (SED),
SURFACE WATER (SW), AND MONITORING WELL (C) SAMPLES TAKEN AT CONSERVATION CHEMICAL, GARY, INDIANA

	C1	C2	C2 Dup	C3	C4	C5	C6	SW-1	SED1	SED2	Blank
acetone	930	120	400	130	-	6800	30000	-	B	15000C	73
benzene	25K	430	600	-	-	-	950	-	375K	1463K	-
branoform	-	-	-	-	-	-	-	-	750K	2925K	-
2-butanone	140	-	110	-	-	2400	4400	-	B	B	-
carbon disulfide	-	-	-	-	-	-	13	-	-	-	-
chlorobenzene	-	-	-	-	-	-	-	-	-	3100	-
chloroethane	-	-	57	-	-	-	-	-	-	-	-
chloroform	-	-	-	-	-	-	210	-	375K	2100	-
1,1-dichloroethane	-	310	440	-	8	1800	250	-	-	-	-
1,2-dichloroethane	66	19	23	-	-	880	280	-	1100	6700	-
1,1-dichloroethene	-	-	25K	-	-	-	50	-	-	-	-
ethylbenzene	-	-	-	-	-	-	250	-	1200C	10000C	-
2-hexanone	-	-	-	-	-	-	54	-	-	-	-
4-methyl-2-pentanone	37	-	43	-	-	4800	2200	-	-	-	-
methylene chloride	4800	75C	20C	12C	B	4800	3600	5K	B	7700C	5K
tetrachloroethene	-	-	-	5K	-	-	-	-	950	3300	5K
toluene	-	-	25K	-	-	950	350	-	375K	1800C	5K
total xylenes	-	50	170	6	-	500K	420	-	B	5400C	-
trans-1,2-dichloroethene	-	34	37	-	-	-	45	-	-	-	-
1,1,1-trichloroethane	-	130	190	-	-	6700	1900	-	-	-	5K
1,1,2-trichloroethane	-	-	-	-	-	2200	500	-	620	2800	-
trichloroethene	-	140	190	-	-	13000	2100	-	375K	-	8

Note: Water samples reported in ug/l, parts per billion or ppb.
Sediment samples reported in ug/g, parts per million or ppm.
B = Amount in blank is greater than 1/2 the amount detected.
C = Amount has been corrected for the amount in the blank.
K = Compound is present, but below the listed detection limit.

TABLE 4: SUMMARY OF THE ORGANIC RESULTS FOR TENTATIVELY IDENTIFIED COMPOUNDS IN SEDIMENT (SED),
SURFACE WATER (SW), AND MONITORING WELL (C) SAMPLES TAKEN AT CONSERVATION CHEMICAL, GARY, INDIANA

	C1	C2	C2 Dup	C3	C4	C5	C6	SW-1	SED1	SED2	Blank
benzene, 1,3-dimethyl	-	-	-	-	-	-	260	-	-	-	-
benzene, 1,4-dimethyl	-	96	-	-	-	-	-	-	-	-	-
benzene, propyl	-	-	-	-	-	-	42	-	-	-	-
cyclohexane methyl	-	-	-	-	-	-	200	-	26000	-	-
cyclohexane 1,1,3-trimethyl	-	-	-	-	-	-	-	-	47000	-	-
cyclopentane, methyl	-	-	-	-	-	-	110	-	-	-	-
dimethoxy-methane	-	-	-	53	-	-	-	-	-	-	-
1,4-dioxane	70	-	400	16	-	-	-	-	-	-	-
furan, tetrahydro	150	1200	-	72	-	-	-	-	-	-	25
3-heptanol, 3-methyl	-	-	-	-	-	-	54	-	-	-	-
hexane, 3-methyl	-	-	-	-	-	-	-	-	19000	-	-
1-(2-methoxyethoxy)-butane	-	-	-	-	-	-	-	-	-	-	-
molecular sulfur	-	-	-	-	-	-	-	-	-	-	-
oxybis-methane	-	-	-	330	-	-	-	-	-	-	-
1,1-oxybis/2-methoxy-ethane	-	-	-	-	-	360	670	-	-	-	-
pentane, 2,3-dimethyl	-	-	-	-	-	-	-	-	8400	-	-
1,1,2-trichloro-1,2,2-trifluoro-ethane	-	-	-	12	-	-	68	-	-	-	-
3,5,5-trimethyl-2-cyclohexane	-	-	-	-	-	-	200	-	-	-	-
1,2,4-trithiolane	-	-	-	-	-	-	120	-	-	-	-

Note: Sediment samples reported in ug/g, parts per million or ppm.

Water samples reported in ug/l, parts per billion or ppb.

Computer FIT of the tentatively identified compound was equal to or greater than 90%.

TABLE 5: RESULTS FROM THE INORGANIC ANALYSIS OF SEDIMENT (SED), SURFACE WATER (SW), AND MONITORING WELL (C) SAMPLES TAKEN AT CONSERVATION CHEMICAL, GARY, INDIANA

	C1	C2	Dup C2	C3	C4	C5	C6	SW-1	SED1	SED2	Blank
aluminum	66200	72600	65400	2600	13200	26400	24900	730	3500	310	ND
antimony	1730	22	34	ND	ND	47	130	ND	6.95	ND	ND
arsenic	1490	220	250	40s	66	140	340	ND	42	31	ND
barium	360	920	970	140	120	660	ND	250	48	ND	ND
beryllium	20	6	5	ND	5	ND	7	ND	0.3	ND	5
boron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cadmium	140	81	66	19s	11	5.4	110	7.3	13	0.10	ND
chromium	540	3450	3640	27	1310	3280	46000	95	600	6.2	ND
cobalt	3930	200	160	380	90	1390	6520	ND	22	ND	ND
copper	4550	2910	2810	1160	7020	340	1320	99	640	49	ND
cyanide	ND	ND	0.465	ND	ND	ND	0.02	ND	7.92	ND	ND
iron	168000	85500	73400	8220	42200	296000	956000	4480	96700	10600	ND
lead	230	8640	7050	159	306	309	14700	280	1240	470	ND
manganese	7460	5150	6750	1120	1860	5630	91500	85	860	47	ND
mercury	ND	0.4	ND	ND	ND	ND	ND	ND	0.66	ND	ND
nickel	8580	510	500	330	210	4380	21900	ND	190	37	ND
selenium	410	5	12	ND	ND	5	24	ND	0.7	0.4	ND
silver	45	14	ND	ND	ND	16	35	ND	1.4	ND	ND
thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tin	1410C	69C	40C	NDB	NDB	NDB	200C	NDB	15C	NDB	NDB
vanadium	490	580	ND	ND	ND	ND	ND	ND	31	13	ND
zinc	36200C	6120C	5460C	10940	3050C	116200C	27850C	97C	540C	24C	NDB

Note: Sediment samples reported in ug/kg, parts per billion or ppb.

Water samples reported in ug/l, parts per billion or ppb.

C = Corrected value

NA = Not applicable

ND = Not detected

NDB = Not detected due to blank contamination

permeable, therefore, a high potential for groundwater contamination exists. Thus, the contaminants found in the groundwater, surface water, and sediment samples may be linked to Conservation Chemical and/or past Berry Oil processes.

The primary water supply source for the area surrounding Conservation Chemical is Lake Michigan. Although the groundwater is not a primary drinking water source, 59 water supply wells were identified within a 3-mile radius of the site (Lunsford, 1984). The relative close proximity of the area wells to Conservation Chemical in combination with the highly permeable soils presents a real, potential threat to the groundwater supply.

SECTION 7 - CONCLUSIONS

1. The Grand Calumet River is not directly susceptible to contamination from Conservation Chemical, since surface water drainage is northward away from the river. The shallow groundwater table with its permeable soils has, however, been contaminated as indicated by the chemical analyses results.
2. The downgradient wells, C5 and C6, evidenced the greatest contamination, especially volatile organics. Well C6 evidenced the greatest number of tentatively identified compounds. Eleven compounds were common to both C5 and C6 in high concentrations. Included in these eleven compounds are acetone, 2-butanone (methyl ethyl ketone), 1,1-dichloroethane, 1,2-dichloroethane, 4-methyl-2-pentanone, methylene chloride, toluene, total xylenes, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene.
3. The non-priority pollutant acid compounds, 2-methylphenol (o-cresol) and 4-methylphenol (m-cresol), were detected only in well C2. Both o-cresol and m-cresol are found in petroleum, therefore, their source in this shallow well may be associated with past Berry Oil Company's activities and/or Conservation Chemical activities. The solvent bis(2-chloroethyl) ether was also found in well C2. Isophorone, a solvent, was detected at a greater concentration in the deep well C5 than in the shallow well, C6.
4. Both the shallow well C2 and the duplicate for C2 indicated the pesticide 4,4-DDD. This pesticide was also found in the surface water sample upgradient from well C2.

5. From the constituents which comprise the U.S. EPA Drinking Water Standards, arsenic, cadmium, chromium, copper, iron, lead, manganese, selenium, and zinc exceeded the recommended concentration limits in the well samples.
6. The surface water sample (SW-1) evidenced concentrations greater than drinking water standards for cadmium, iron, lead, and manganese. Also, aluminum concentrations of 730 ppb and 21.4 ppb of 4,4-DDD were detected.
7. The sediment 1 (SED 1) sample showed high concentrations of chromium, iron, lead, and manganese. High concentrations of iron and lead were also detected in the sediment 2 (SED 2) sample. Overall, the SED 2 sample was highest in the volatile fraction concentrations. This is possibly due to SED 2's downgradient location near the "pie-basin." The tentatively identified compounds cyclohexane methyl, cyclohexane 1,1,3-trimethyl, 3-methylhexane, and 2,3-dimethyl pentane were found in very high concentrations in the SED 1 sample.

REFERENCES

Havens and Emerson Incorporated Consulting Engineers. August 1983.

"Gary Municipal Airport Authority, Gary, Indiana, Hazardous Waste Assessment at Conservation Chemical Company." Final Report.

Lunsford, Mark. 1984. "Population Survey of Groundwater Usage in the Vicinity of Midco II, Gary, Indiana." Ecology and Environment Report.

United States Department of Agriculture, Soil Conservation Service. July 1972. "Soil Survey of Lake County, Indiana."

APPENDIX A

State IndianaBoring No. C1Site Conservation ChemicalPage 2 of 2

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
	22	Black oily sand				
	24	Tan, well sorted, fine grained sand				
	26	Tan, well sorted, fine grained sand				
	28	Tan, fine to medium grain sand				
	30	Tan, fine to medium grain sand				
	32	Tan, fine to medium grain sand				
	34	Tan, fine to medium grain sand				
	36	Tan, fine to medium grain sand				
	38	Tan, fine to medium grain sand				
	40	Tan, fine to medium grain sand				
	42	Gray Clayey Till - End of Boring				
		Well specifications: <ul style="list-style-type: none">- 5', 2" I.D. stainless steel well screen- 4 - 10.0' galvanized pipe, 2" I.D.- Grouted with cement- Secured with casing protector and lock.- Well screen from 37 to 42 feet				

DRILLING LOG

Page 1 of 1

State Indiana

Start Date October 7, 1983

Site Conservation Chemical

Completion Date October 7, 1983

Boring No. C2

Ground El. 97.56

Drilling Firm Canonie

Groundwater El.
at completion -

Type of Drill -

after 11 days 91.02

Driller Norm

Total Depth of Boring 12.0 feet

Geologist Ron St. John

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
97.44		Ground Surface				
	4	<u>Sand</u> - augered with no samples			Water/oil mixture at 7 feet	
	8					
	12	End of Boring				
	14	Well specifications:				
	16	- 5', 2" I.D. stainless steel well screen				
	18	- 9' galvanized pipe 2" I.D.				
	20	- Grouted with cement				
	22	- Secured with casing protector and lock				
	24	- Well screen from 7 to 12 feet				
	26					

DRILLING LOG

Page 1 of 1State IndianaStart Date October 10, 1983Site Conservation ChemicalCompletion Date October 10, 1983Boring No. C3Ground El. 98.05Drilling Firm Canonie

Groundwater El.

at completion -Type of Drill -after 8 days 91.27Driller NormTotal Depth of Boring 12.0 feetGeologist Ron St. John

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
97.44		Ground Surface				
	20	See log for C1				
	40	End of Boring				
		Well specifications: <ul style="list-style-type: none">- 5', 2" I.D. stainless steel well screen- 3 - 10.0' galvanized pipe, 2" I.D.- Grouted with cement- Secured with casing protector and lock- Well screen from 26 to 31 feet				

DRILLING LOG

Page 1 of 1State IndianaStart Date October 11, 1983Site Conservation ChemicalCompletion Date October 11, 1983Boring No. C4Ground El. 97.84Drilling Firm CanonieGroundwater El.
at completion -Type of Drill -after 7 days 91.27Driller NormTotal Depth of Boring 15.0 feetGeologist Ron St. John

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
97.44		Ground Surface				
	5 10 15	End of Boring Well specifications: - Well set at 15.0 feet - 5'2" I.D. stainless steel well screen - 9' galvanized pipe, 2" I.D. - Grouted with cement - Secured with casing protector and lock. - Well screen from 8.5 to 13.5 feet				

DRILLING LOG

Page 1 of 1State IndianaStart Date October 11, 1983Site Conservation ChemicalCompletion Date October 11, 1983Boring No. C5Ground El. 97.56Drilling Firm CanonieGroundwater El.
at completion -Type of Drill -after 7 days 89.90Driller NormTotal Depth of Boring 25.0 feetGeologist Ron St. John

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
97.44		Ground Surface				
	12	Sand			High concentrations of oil like material at 25'.	
	25	End of Boring				
		Well Specifications: - 5'2" I.D. stainless steel well screen - 2 - 10.0' galvanized pipe, 2" I.D. - Grouted with cement - Secured with casing protector and lock. - Well screen from 17 to 22 feet				

DRILLING LOG

Page 1 of 1State IndianaStart Date October 11, 1983Site Conservation ChemicalCompletion Date October 11, 1983Boring No. C6Ground El. 97.39Drilling Firm CanonieGroundwater El.
at completion -Type of Drill -after 7 days 89.84Driller NormTotal Depth of Boring 15.0 feetGeologist Ron St. John

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
97.44		Ground Surface				
	8	Sand				
		End of Boring				
	16	Well Specifications: - 5'2" I.D. stainless steel well screen - 9' galvanized pipe, 2" I.D. - Grouted with cement - Secured with casing protector and lock. - Well screen from 6.5 to 11.5'				

TABLE 2: SUMMARY OF ORGANIC RESULTS FROM THE ANALYSES OF THE ACID, BASE-NEUTRAL AND PESTICIDE FRACTIONS IN SEDIMENT (SED), SURFACE WATER (SW), AND MONITORING WELL (C) SAMPLE TAKEN AT CONSERVATION CHEMICAL, GARY, INDIANA

	C1	C2	C2 Dup	C3	C4	C5	C6	SW-1	SED1	SED2	Blank
ACID COMPOUNDS											
2,4-dimethylphenol	-	-	-	-	-	10K	-	-	-	-	-
phenol	-	10K	-	-	-	10K	-	-	-	-	-
NON-PRIORITY POLLUTANT HAZARDOUS SUBSTANCES											
2-methylphenol	-	16	-	-	-	-	-	-	-	-	-
4-methylphenol	-	104	-	-	-	-	-	-	-	-	-
BASE NEUTRAL COMPOUNDS											
bis(2-chloroethyl)ether	-	45	-	-	-	10K	10K	-	-	-	-
diethylphthalate	-	-	-	-	-	10K	-	-	-	-	-
isophorone	-	-	-	-	-	3422	346	-	-	-	-
naphthalene	-	10K	-	-	-	-	10K	-	10K	10K	-
n-nitrosodi-n-propylamine	-	-	-	-	-	-	-	-	10K	10K	-
NON-PRIORITY POLLUTANT HAZARDOUS SUBSTANCES											
benzyl alcohol	-	-	-	-	-	-	20K	-	-	-	-
2-methylnaphthalene	-	20K	-	-	-	-	20K	-	20K	20K	-
PESTICIDES											
4,4-DDD	-	11.9	15.9	-	-	-	-	21.4	-	-	-

Note: Sediment samples reported in ug/g, parts per million or ppm.
Water samples reported in ug/l, parts per billion or ppb.
K = Compound is present, but below the listed detection limit.

SUBURBAN LABORATORIES INC.
ANALYSIS FOR ORGANIC CHEMICAL COMPOUNDS
BY
GAS CHROMATOGRAPHY / MASS SPECTROMETRY

.....6-3356

MS FILE NO. 11/27/85.D3

IDENT.....PEI

SAMPLE: TANK 1S 11/27/85

ANALYSIS FOR VOLATILE ORGANIC COMPOUNDS BY GC/MS REPORT
METHOD : 8240 PURGE AND TRAP

COMPOUND	MDL ng/g	CAS NUMBER	SAMPLE CONC. ng/g
+4-Bromofluorobenzene.....	1.00		400.00
Acrolein.....	*	107-02-8..	*
Acrylonitrile.....	*	107-13-1..	*
Benzene.....	1.00	71-43-2..	945876.5
Bromodichloromethane.....	1.00	75-27-4..	9622.33
Bromoform.....	1.00	75-25-2..	BDL
Bromomethane.....	1.00	74-83-9..	BDL
Carbon tetrachloride.....	1.00	56-23-5..	46733800.
Chlorobenzene.....	1.00	108-90-7..	BDL
Chloroethane.....	1.00	75-00-3..	BDL
2-Chloroethylvinyl ether.....	1.00	110-75-8..	BDL
Chloroform.....	1.00	67-66-3..	295195.7
Chloromethane.....	1.00	74-87-3..	BDL
Dibromochloromethane.....	1.00	124-48-1..	BDL
1,3-Dichlorobenzene.....	1.00	95-50-1..	BDL
1,3-Dichlorobenzene.....	1.00	541-73-1..	2027852.
1,4-Dichlorobenzene.....	1.00	106-46-7..	BDL
1,1-Dichloroethane.....	1.00	75-34-3..	798586.7
1,2-Dichloroethane.....	1.00	107-06-2..	BDL
1,1-Dichloroethene.....	1.00	75-35-4..	47484880.
trans-1,2-Dichloroethene.....	1.00	156-60-5..	20676.15
1,2-Dichloropropane.....	1.00	78-87-5..	BDL
cis-1,3-Dichloropropene.....	1.00	10061-01-5..	BDL
trans-1,3-Dichloropropene.....	1.00	10061-02-6..	BDL
Ethyl benzene.....	1.00	100-41-4..	45685584.
Methylene chloride.....	1.00	75-09-2..	67444336.
1,1,2,2-Tetrachloroethane.....	1.00	79-34-5..	BDL
Tetrachloroethene.....	1.00	127-18-4..	26580540.
Toluene.....	1.00	108-88-3..	BDL
1,1,1-Trichloroethane.....	1.00	71-55-6..	***** 40,234,268
1,1,2-Trichloroethane.....	1.00	79-00-5..	8224189.
Trichloroethene.....	1.00	79-01-5..	***** 10,900,177
Vinyl chloride.....	1.00	75-01-4..	BDL

ANALYSIS SCREENED - INTERNAL STANDARD
- MINIMUM DETECTION LIMIT - BDL - BELOW DETECTION LIMIT
***** ORG. R. LHM. QUANTIFICATION LIMITS OF DETECTION

SUBURBAN LABORATORIES, Inc.

4140 LITT DRIVE

HILLSDALE, ILLINOIS 60162 - 1183

EARL I. ROSENBERG
President

April 15, 1986

H.R. THOMAS, JR.
DirectorPEI Associates, Inc.
11499 Chester Road
Cincinnati, Ohio 45246

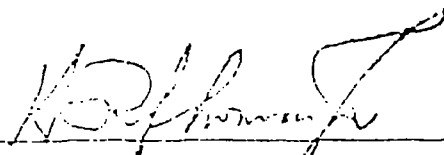
Attention: Mr. Paul Kefauer

Samples Received: 12/26/85Source: S/L #3356A - ~~Tank 1S~~, 11/27/85
S/L #3357A - Tank 2S, 11/27/85

		#3356A	<u>#3357A</u>
Water	(%)	0.2	0.6
Flash Point (CC)	(°F)	*	32°F
BTU/lb.		11232	10617

* Non-Flammable bp 175°F

ANALYSIS CERTIFIED BY:



, Director (HRT/ak)

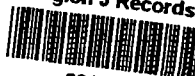
DRILLING LOG

Page 1 of 2State IndianaStart Date October 7, 1983Site Conservation ChemicalCompletion Date October 7, 1983Boring No. C1Ground El. 97.49 feetDrilling Firm CanonieGroundwater El.
at completion -Type of Drill -after 11 days 90.43Driller NormTotal Depth of Boring 42.0 feetGeologist Ron St. John

Elev.	Depth	Description	Blow Count	Sample No.	Remarks	Well Const.
97.44		Ground Surface				
	2	Augered from 0-24 feet				
	4					
	6					
	8					
	10					
	12					
	14					
	16					
	18					
	20					

0300004

EPA Region 5 Records Ctr.



224903

SITE ASSESSMENT

FOR

CONSERVATION CHEMICAL COMPANY
GARY, INDIANA

Prepared For:

U.S. Environmental Protection Agency
Region V
230 S. Dearborn Street
Chicago, Illinois

CONTRACT NO. 68-95-0017

TAT-05-F-00541

TDD# 5-8502-06

Prepared by:

WESTON-SPER
Technical Assistance Team
Region V

February 1985



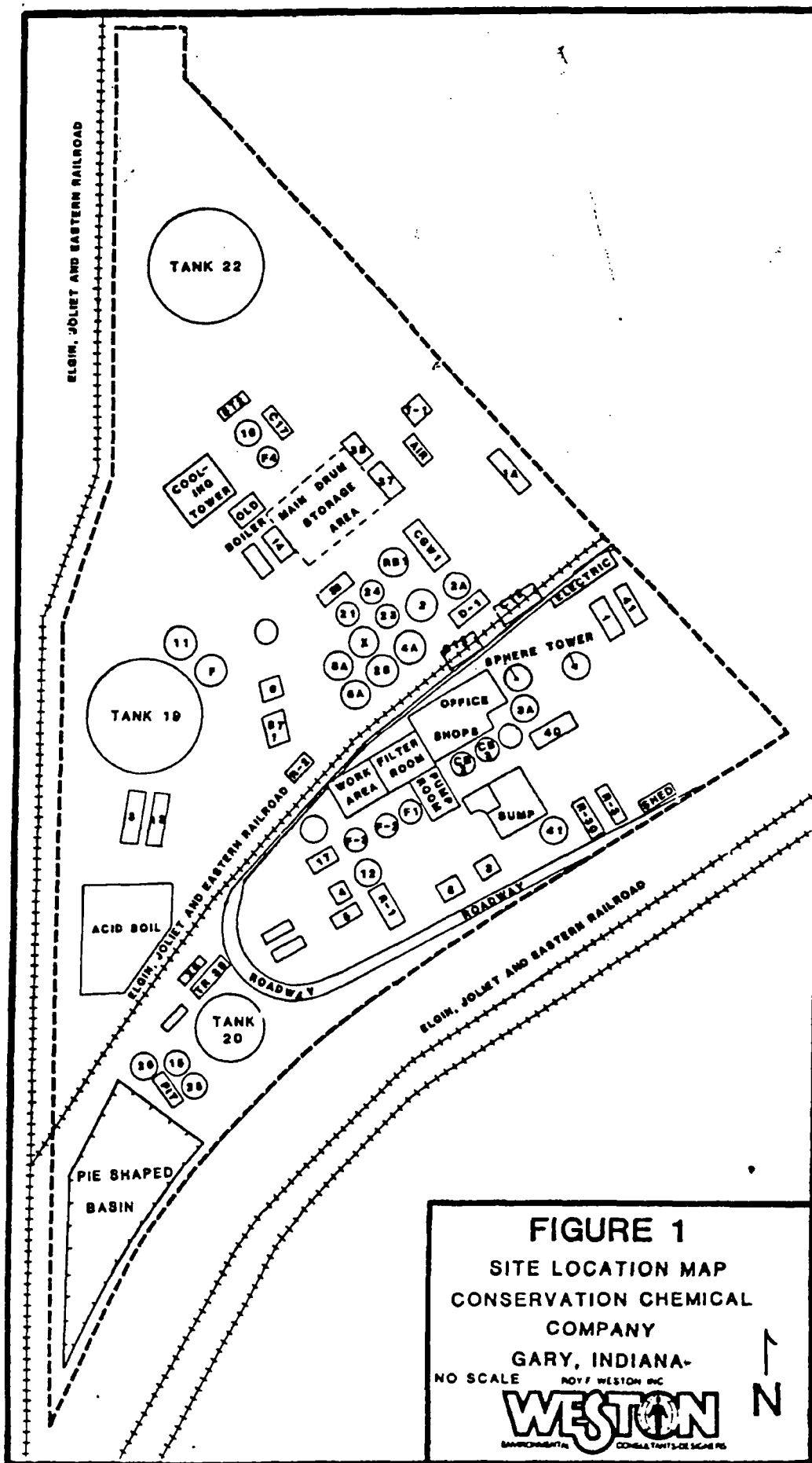
1.0 INTRODUCTION

On February 8, 1985, per request of the U.S. Environmental Protection Agency (U.S. EPA), the Technical Assistance Team (TAT) conducted an inspection of Conservation Chemical Company in Gary, Indiana. The facility encompasses a triangular four acre parcel of land at 6500 Industrial Highway. The site is bounded on two sides by the Elgin, Joliet, and Eastern Railroad right-of-ways and on the third side by a vacated industrial lot (Figure 1). The Gary Municipal Airport lies just to the southeast of the facility (Figure 2). The facility reportedly had on its premises deteriorated and leaking tanks that contain cyanide waste sludge. The inspection undertaken by the TAT was to determine whether an emergency situation existed at the facility based on imminent hazards to human health and the environment.

2.0 SITE HISTORY

Background information on the site was provided by two technical reports. The first report was generated by Havens and Emerson for the Gary Municipal Airport Authority in October of 1983 and the second report was prepared by Ecology & Environment for the U.S. EPA in May of 1984. The Havens and Emerson report was initiated by the airport authority to determine the cost and feasibility of cleaning up the site relative to the proposed acquisition by the airport for an expansion. The Ecology & Environment report was prompted by the Remedial Response Branch (U.S. EPA) for purposes of ranking the site for the National Priority List. Both reports addressed the types of contaminants present on the site and the potential for ground water contamination. Monitoring wells have been installed at the site by both contractors.

Conservation Chemical began its operation at the present location in April of 1967. Prior to 1967, the Conservation Chemical site was owned and operated by the Berry Oil Company, a petroleum refinery. Many of the drums and tanks that were left by the refinery have been used by Conservation Chemical. Other remnants still remaining on the site from the original petroleum refinery include the office/shop building, two concrete-lined pits, a distillation column, and a forced-draft cooling tower. Also remaining from the refinery is a pie-shaped basin at the southern apex of the site that was believed to be part of the wastewater treatment and disposal system for the refinery. According to Mr. Norman Hjersted, owner of Conservation Chemical, a majority of the waste oils remaining on site were left from the refinery operation. The Conservation Chemical site was purchased by Mr. Norman Hjersted in April 1967. From 1967 to 1975, the facility was used in the production of ferric chloride. In 1975,



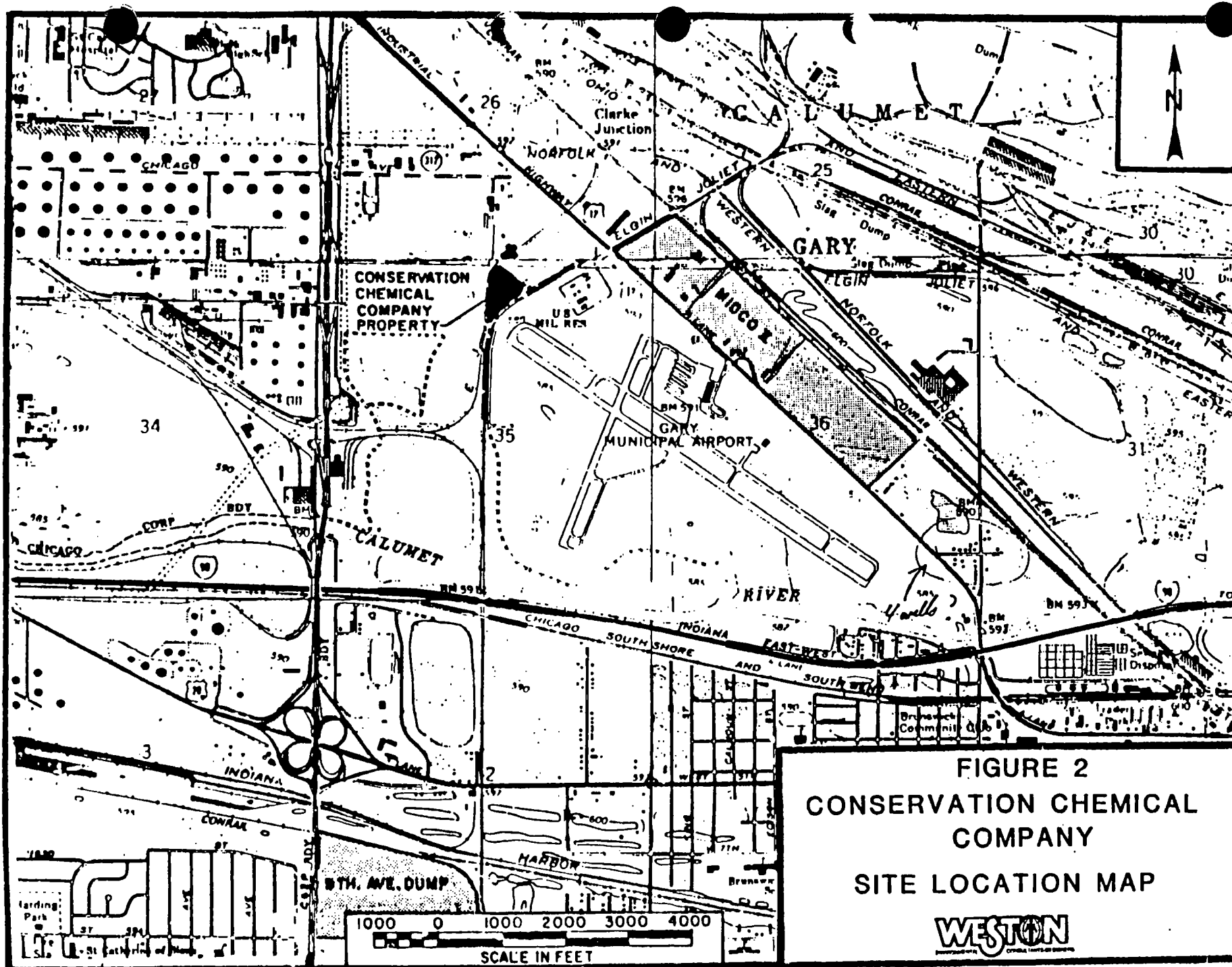


FIGURE 2
CONSERVATION CHEMICAL
COMPANY
SITE LOCATION MAP

WESTON
ENGINEERING & CONSULTING



Conservation Chemical ceased production of ferric chloride and became a hazardous waste terminal and treatment facility. Neutralization was the primary form of treatment utilized. The cyanide solutions that currently exist on site were brought to the site while it operated as a hazardous waste facility. Regulations in 1980 forced Conservation Chemical to stop the transport of hazardous wastes. The plant was re-designed at this time again for the production of ferric chloride.

Conservation Chemical is presently involved in the manufacturing of iron salt coagulants, primarily ferric chloride. The process involves the reaction of ferrous chloride pickling liquor with chlorine and scrap iron. The ferrous chloride pickling liquor is concentrated by thermal evaporation and air oxidized, chlorine is reacted with the ferrous chloride and in the presence of additional chlorine atoms produces ferric chloride. Scrap iron is added to increase the concentration of the ferric chloride and/or to remove the free acidity by conversion to the iron salts.

The waste pickling liquor employed at the site is generated from the steel mill industry in the surrounding area. Pickling lines are used in steel mills to remove scales that form on the metal during the rolling process. The scales have to be eliminated to prevent a lack of uniformity and any irregularities on the metal surface. Continuous picklers will utilize either hydrochloric acid or sulfuric acid. A ferrous chloride waste product results from a pickling process using hydrochloric acid; the scales are dissolved in the acid in the form of ferrous chloride. When the ferrous chloride reaches a concentration of 18% to 20%, the pickling acid is no longer usable and must be discharged. The spent pickling liquor will contain free hydrochloric acid, ferrous chloride and water. Conservation Chemical accepts the spent pickling liquor and converts it to ferric chloride as described above. The product ferric chloride is sold to waste treatment plants as a chemical precipitant for phosphorous removal in activated sludge.

3.0 GEOLOGY AND HYDROLOGY

The surface geology in the general area of Conservation Chemical is dominated by a relatively flat topography within the confines of the Calumet lacustrine plain which exhibits dunes and beach ridges. Approximately 150 feet of unconsolidated glacial deposits overly the bedrock which consists of closely jointed dolomites and cherty limestone of Middle Silurian age. The top 50 feet of the till deposits are comprised of glaciolacustrine sand and gravel in form of bars, spits, beach ridges and some dunes. These deposits make up the

upper unit of the Atherton Formation. Beneath this upper unit extends a 100 feet thick unit composed of pebbly, sandy, and silty clay till that also exhibits discontinuous seams of sand and gravel.

The near surface soils on the site have been disturbed extensively by various construction activities. A large amount of fill material, such as slag, cinders and dirt, has also been brought to the site. The original soil is classified as the Oakville-Tawas complex which consists of 45% Oakville fine sand, 45% Tawas muck over fine sand, and 10% Maumee loamy fine sand and gently sloping Oakville sand. The hydraulic conductivities of the complex range from 4.4×10^{-4} to 1.4×10^{-3} cm/sec in the muck to greater than 1.4×10^{-2} cm/sec in the fine sand.

As previously mentioned, the topographic relief in the area of the site is very slight. Surface water drainage is in a southwestern direction across the site towards the Grand Calumet River, approximately one mile to the south. During the summer months, ponding occurs extensively throughout the area. Several marshes also exist to the west and southwest of the site.

The direction of ground water flow on the site is difficult to determine. A ground water divide is believed to exist in the general location of the site. Ground water flow moves either northward toward Lake Michigan or southward toward the Grand Calumet River. The water table is situated approximately 12 feet beneath the surface under unconfined conditions. The saturated thickness of the shallow aquifer, the Calumet Aquifer, is approximately 50 feet. Ground water recharge occurs through direct infiltration of precipitation. The underlying clay till unit, which acts as the base to the aquifer, has an average conductivity of 1.4×10^{-7} cm/sec.

4.0 SITE INSPECTION

On February 8, 1985, TAT members Doug Ballotti and Dean Geers accompanied U.S. EPA representative Bill Simes on the site inspection of Conservation Chemical. The TAT and U.S. EPA personnel met with the facility's plant manager, James Poisel prior to conducting the inspection. Mr. Poisel supplied the TAT with an up-to-date inventory of tank contents and drums on site (Tables 1 and 2), in addition to a site map (Figure 2). Level C protection was donned by the TAT and U.S. EPA for the inspection. Mr. Poisel, with no personal protection, accompanied the TAT and U.S. EPA during the inspection and provided information on the various tanks and pits on site.

TABLE 1

TANK INVENTORY OF CONSERVATION CHEMICAL AS OF FEBRUARY 4, 1985¹

Tank Number	Contents	Capacity (gal)	Quantity (gal)
CB-2 and TUB	Ferrous chloride	16,200	8060
CB-3 and TUB	In process	16,200	N/A
3-A	Ferric chloride	21,400	13,603
R-3	Ferrous chloride	10,250	N/A
R-30	Ferrous chloride	7000	6700
12	Ferrous chloride	12,200	10,415
F-1	In process	21,000	21,000
F-2	Ferric chloride	21,000	8348
F-3	Ferrous chloride	14,000	N/A
RR-1	Ferrous chloride	8500	6450
40	Hydrochloric acid	15,500	10,544
41	Hydrochloric acid	15,500	N/A
1	To be used for storage		
17	To be used for storage		
Rail car 82996	Chlorine	N/A	180,000
Rail car 75242	Chlorine	N/A	14,453
Rail car 75423	Ferric chloride	N/A	15,969
R-15	Waste acid	8000	Empty
R-31	Waste acid	8000	Unusable
R-38	Waste acid	2400	N/A
20	Neutral acid sludge	420,000	242,760
5	Silica etch	121,000	3000
2	Solvent	462,000	43,600
D-1	Solvent	120,000	9000
1-S	Solvent	234,000	5780
2-S	Solvent	172,000	161,000
19	Oil and water sludge	842,000	13,992
22	Ashpaltic fuel oil	1,464,685	137,514
F-11	Dirt and solvent spill	6000	5200
Sphere	Cyanide	22,800	7700
Tower	Cyanide	30,000	8500
RR2	Cyanide	10,000	6000
TR38	Cyanide	6500	1500
ST1	Cyanide	20,000	18,000
DB1	Cyanide	120,000	2235
2A	Cyanide	21,400	11,637
4A	Cyanide	21,400	20,900
8A	Cyanide	17,625	17,000
26	Cyanide	14,350	11,115
28	Cyanide	19,100	18,781
23	Cyanide	19,100	11,000
X	Cyanide	19,430	12,953
CY1	Sludge	22,100	1473

¹ Information obtained from dated inventory sheet supplied by Conservation Chemical.

TABLE 2

DRUM AND VARIOUS CONTAINER INVENTORY
 CONSERVATION CHEMICAL COMPANY¹

<u>Container Content Description</u>	<u>Quantity</u>
Empty cyanide sludge drums	N/A
Empty plastic container	16
Empty plastic container with tops removed	10
Large oil containers	3
Large empty containers	3
Five gallon paint pails	2
Five-gallon bottles	4
Acid in brown plastic container	1
HF in blue plastic container	1
Paint in 1 gallon and 5 gallon pails	4
Fiberglass crystals/drum	1
Unknown drummed material	2
Iron filings/drum	1
White paste/drum	1
Water (?)/drum	3
Soil, lime, and neutralized nitric sludge/recovery drum	1
Lapping oil/drum	22
Acid (?)/drum	1
Irodite/drum	1
White crystals/drum	5
Green crystals/drum	2
Black and orange material/drum	2
Red material-soil (cobalt?)	N/A
Plastic chrome/drum	N/A
Paint sludge/drum	8
Copper crystals (acid)/drum	19
Lab chemicals/drum	14
Filer aid (?)/drum	1
Solvent contamination soil/drum	24
Overpacked material (?)	19
Tiles/overpack	15
Empty/drum	2
Cyanide-contaminated soil/drum	7
Cyanide (?) -contaminated material/drum	2

¹ Information supplied by Conservation Chemical; total of 154 drums with material and 110 are empty.

The majority of the cyanide sludge waste tanks are located along the north side of the railroad spur directly across from the office/shop building. The spherical tank and distillation tower adjacent to the office-shop building also contained cyanide sludge material. According to Mr. Poisel, these materials are probably not marketable and will have to be disposed. He was not aware of any immediate disposal plans for the sludge. Many of the cyanide tanks inspected by the TAT showed signs of corrosion and appeared in relatively poor condition. None of the cyanide tanks on site appeared to be leaking; however, due to the extreme cold weather conditions, most of the materials in the tanks were believed to be frozen or highly viscous. The TAT noted that many of the manways of the cyanide tanks appeared to have condensate formation along the seam. Mr. Poisel was unsure why this occurred; he contended that the manways were integrally sound. There was no evidence of any leakage around the seams; however, several of the seams had been resealed with fiberglass.

The drum storage area contained approximately 264 drums. According to the facility's inventory sheet, 110 of these are empty. Many of the drums have been overpacked with no identifying marks. Table 2 indicates the number and contents of drums on the site. Three large refinery storage tanks exist at the facility. The first tank inspected was tank #22 which contains a viscous fuel oil that, according to Mr. Poisel, is contaminated with low level concentrations of PCBs. He said the material will eventually be disposed of, but was unaware of any time schedule. The second large refinery tank inspected was tank #19. It contained what is believed to be #6 fuel oil and some type of oily sludge. The tank is in poor condition and has reportedly leaked over the past year. Some dark oil/sludge material was evident around the base of the tank; however, at the time of the inspection, the tank did not appear to be leaking. Adjacent to tank #19 was a small lagoon that accepted run-off from the site and some of the leakage from tank #19. The contents of the lagoon are unknown. However, some of the exposed soils around the lagoon are reddish stained indicating a high iron metal content. This lagoon is also used as an evaporation area for the cooling water of the ferric chloride process. The last refinery tank inspected was tank #20 which contains a neutralized acid sludge. The tank is in poor condition and has had reported leaks in the past. Mr. Poisel indicated that they were in the process of excavating a pit adjacent to the tank as part of the spill contingency.

The pie-shaped basin at the southern apex of the property was covered with snow obscuring its perimeter and the confined materials. Mr. Poisel indicated that Conservation Chemical does not actively dump or dispose of anything in the lagoon.

The basin was originally used as a settling lagoon for the disposal of hazardous waste materials and oil products. The surface of the lagoon is elevated approximately four feet above the office/shop area, apparently to ensure infiltration into the high water table (Havens and Emerson, 1983). The surface impoundment is believed to contain several hundred tons of sludge resulting from lime treatment of spent pickle liquor and several thousand tons of slop oil emulsion solids from petroleum refining. Small gas eruptions have been described as occurring atop the surface of the basin. These eruptions are believed to be gas releases by reactive materials in buried containers upon contact with water (Havens and Emerson, 1983).

Inspection of the tanks directly behind and adjacent to the office/shop building revealed a variety of storage tanks used in the present operation. These tanks contain either ferric chloride and ferrous chloride solutions or hydrochloric acid. Other materials that are stored in close proximity include cyanide sludge and silica etch (acid). Four new tanks are presently empty but are slated to replace several of the deteriorating tanks. Mr. Poisel was uncertain when these tanks would be put into use. The rail car tanks on site contain various amounts of chlorine and ferrous chloride.

5.0 CONCLUSIONS AND RECOMMENDATIONS.

Prior to the initiation of the site inspection, it was decided if any extensive sampling was necessary to determine the hazards on site; the sampling would be conducted during the following week. Upon completion of the site inspection, it was agreed between the TAT and Bill Simes (U.S. EPA) that the sampling effort would be postponed because of that extensive snow cover and extreme cold weather. The majority of the sludge materials were frozen or highly viscous, reducing the potential of spillage or leakage and the extensive snow cover had obscured areas that had sustained spillage. A representative sampling program would have been difficult to conduct under such circumstances.

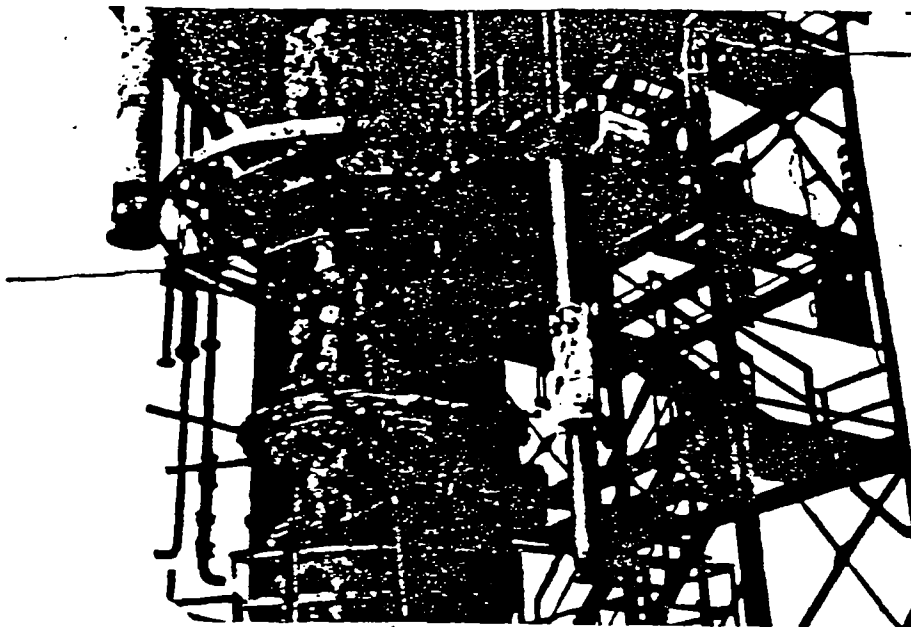
It is strongly recommended that an extensive sampling program be undertaken in the spring when the snow has sufficiently melted and the weather warmed.

It must be stressed that the hazards of the site are severe and that a return inspection should be conducted with high priority in the spring. There exists at least two primary concerns of potential hazards that should be addressed in the follow-up inspection. The amount of cyanide sludge material is estimated at 170,194 gallons; many of the tanks containing this material are in deteriorating condition and are in close



proximity to acid tanks. This intensifies the potential for a cyanide vapor release. This possibility should be thoroughly investigated based on tank integrity and site logistics. The second concern involves the potential for ground water contamination. The surficial geology beneath Conservation Chemical is extremely vulnerable to ground water contamination. The combination of a shallow water table, highly permeable glacial deposits and extensive spillage and leakage on the site poses a severe threat to ground water. Some ground water contamination has already been documented (Ecology & Environment, May 1984). Efforts should be made to determine whether contamination to the Calumet Aquifer presents an imminent hazard to drinking water sources in the area.

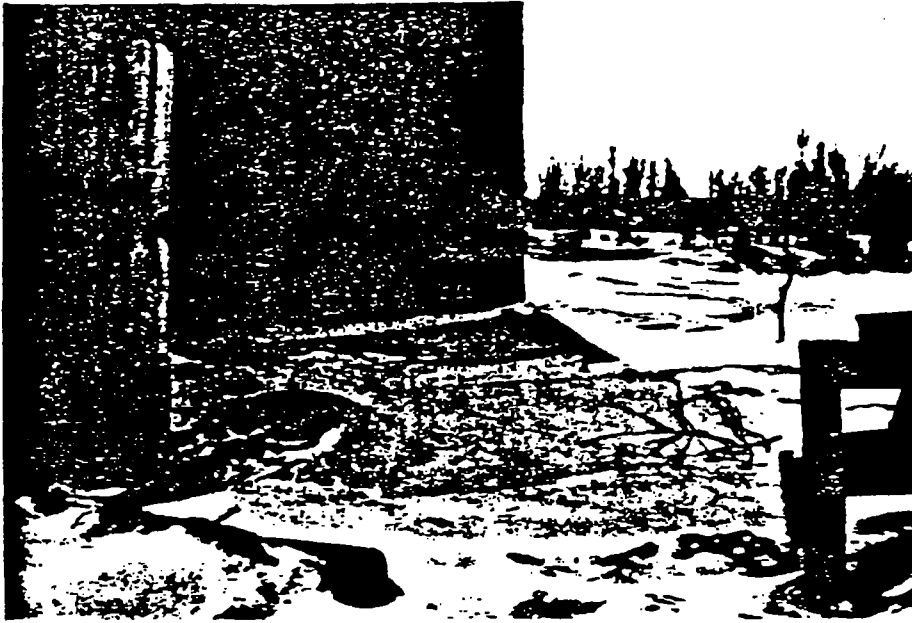
APPENDIX A
PHOTOGRAPHS



Distillation tower containing cyanide sludge.



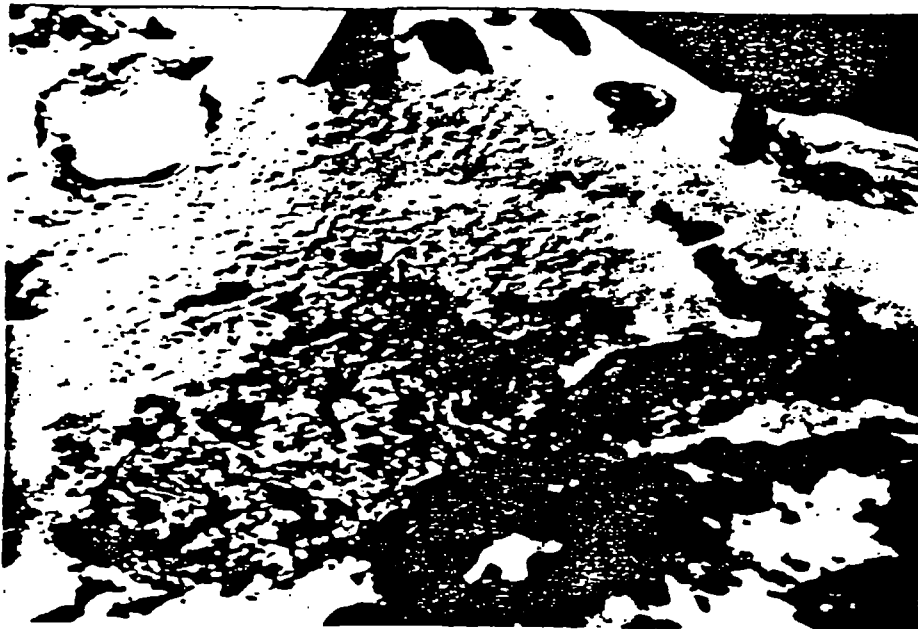
Drum storage area of assorted material.



Tank 19 with process water around it.



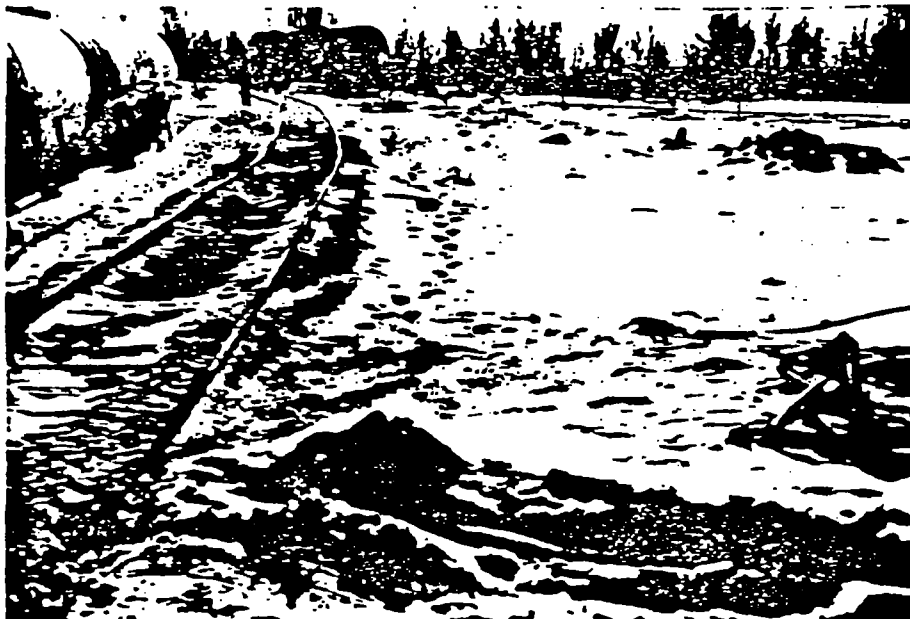
Area where process wastes flow to area around Tank 19.



Oily wastes around base of Tank 19.



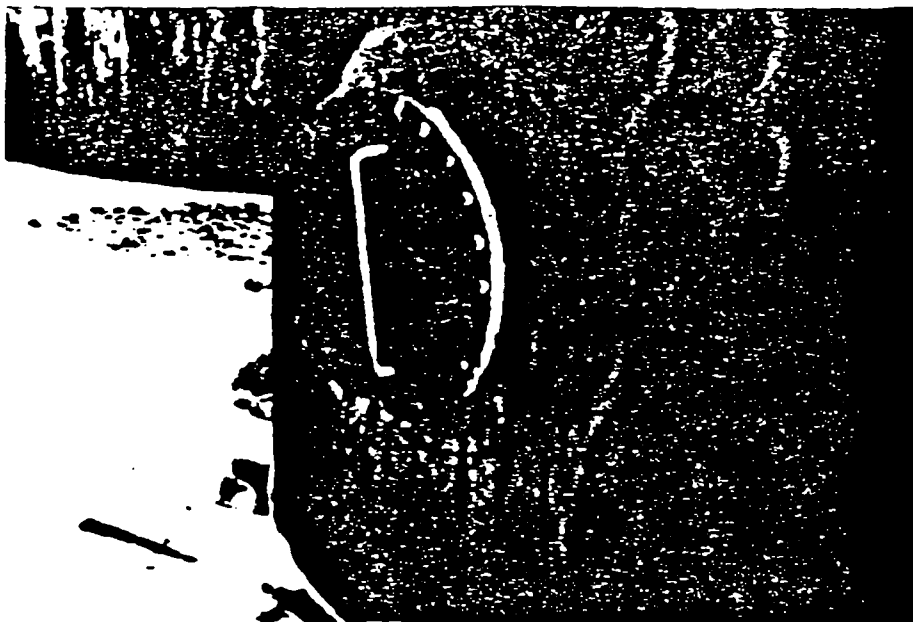
Oily sludge material that has leaked from Tank 19.



Spillage along railroad spur.



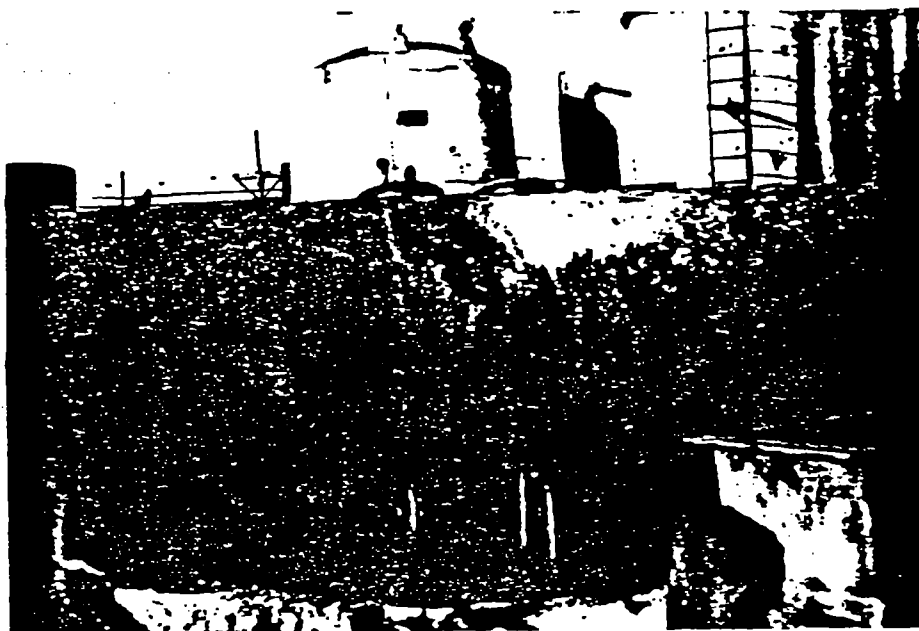
Standing process water - south of Tank 19.



Past leakage and fiberglassing of manway seams
of cyanide tanks.



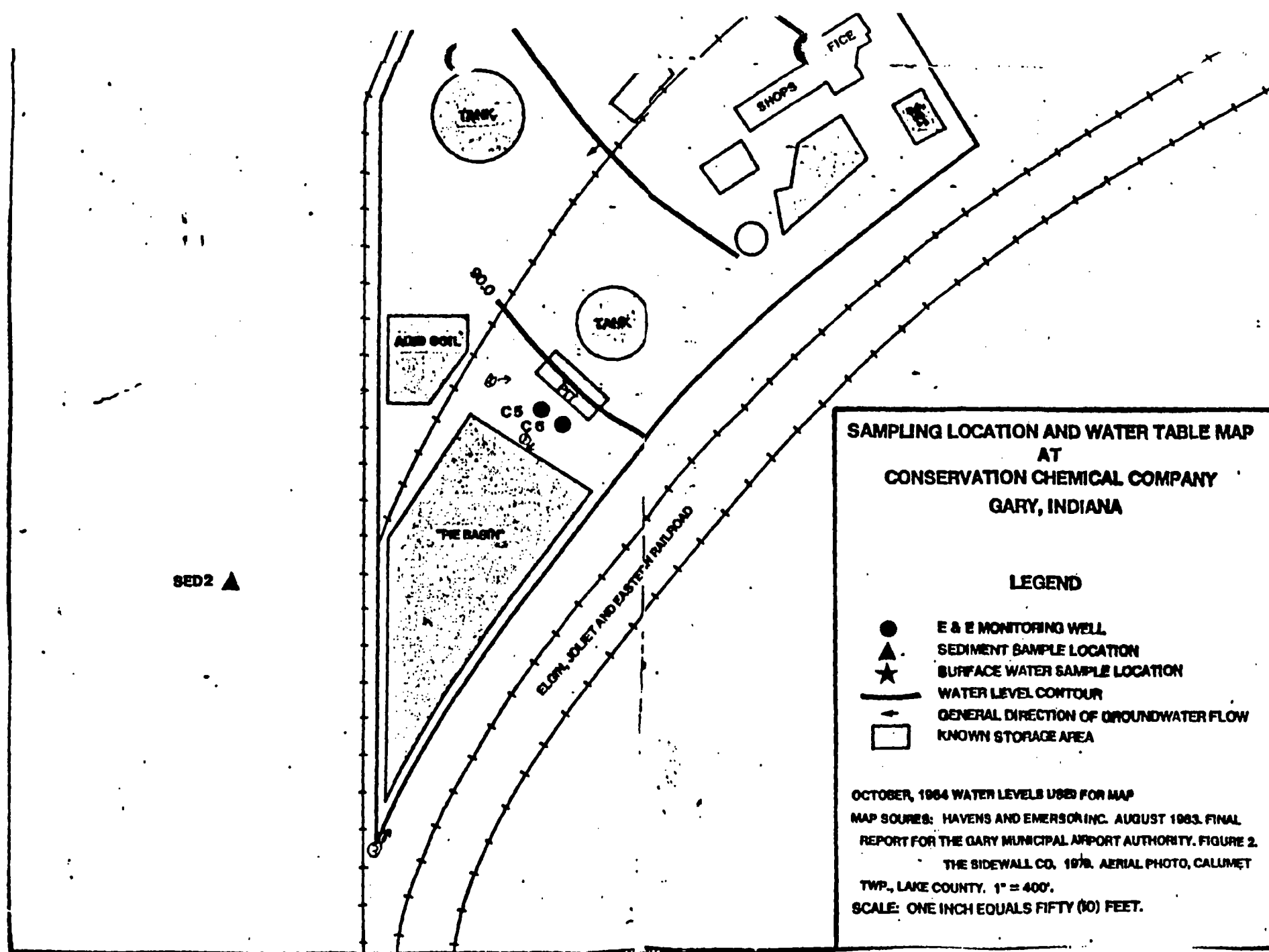
Past leakage and fiberglassing of manway seams
of cyanide tanks.



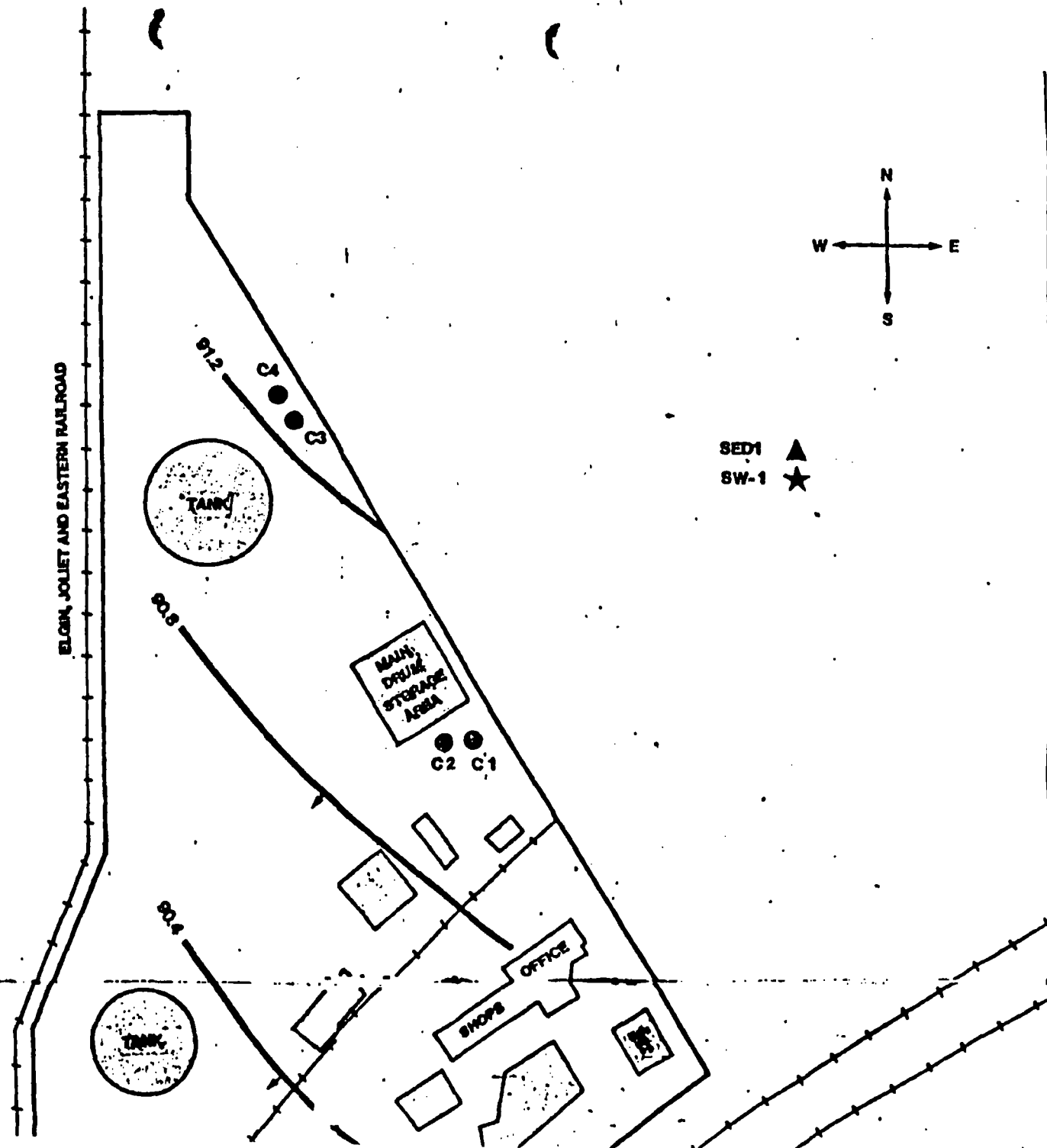
Tank 5 with hole corroded through.



Past leakage and fiberglassing of manway seams
of cyanide tanks.



PL/ 1



0300005

EPA Region 5 Records Ctr.



224904

EMERGENCY ACTION PLAN
FOR
CONSERVATION CHEMICAL COMPANY
GARY, INDIANA

Prepared For:
U.S. Environmental Protection Agency
Region V
230 S. Dearborn Street
Chicago, Illinois

CONTRACT NO. 68-95-0017

TAT-05-F-00607

TDD# 5-8502-06

Prepared by:
WESTON-SPER
Technical Assistance Team
Region V

May 1985



1.0 INTRODUCTION

The Conservation Chemical Company facility, located in Gary, Indiana, is presently functioning as a chemical recycler, producing ferric chloride iron-salt coagulants from waste pickling liquor. The facility encompasses a triangular four-acre parcel of land at 6500 Industrial Highway (Figure 1). The site is bounded on the west and southeast sides by the Elgin, Joliet and Eastern Railroad right-of-ways and on the northeast side by a vacant industrial lot (Figure 2). The Gary Municipal Airport borders the site along the south-east side.

The Conservation Chemical facility is situated approximately one-quarter mile southwest of where its access road joins Industrial Highway. Its location prevents a discernable view of the site from the highway. The site is bisected by a railroad spur that is used to transport chlorine (raw material) into the facility and transport out the ferric chloride product. The majority of the process work area is confined to within the perimeter of the site roadway (Figure 2).

The facility stores on its property hazardous waste materials that were generated from past site activities under the present and previous owners. Due to the nature of the materials existing on site and the condition of the material's containment, the site has been deemed an imminent hazard to the environment and human health. The facility's owner is currently engaged in preparing a RCRA Part-B permit for the second time; the first application submittal was denied by the U.S. EPA due to deficiencies. An enforcement action by the RCRA division for regulation compliance is presently being pursued.

Per the request of the U.S. Environmental Protection Agency (U.S. EPA Spill Response Section), the Technical Assistance Team (TAT) developed this Emergency Action Plan (EAP) for the Conservation Chemical site to provide abatement methods and costs for a site cleanup. The plan basically addresses the above-ground tank storage of cyanide liquid waste, PCB-contaminated oils, neutralized acid waste and organic solvents that exist on site. Inclusive in the plan are recommended removal actions for on-site handling of materials and alternate disposal methods. A cost analysis for the removal action is included in the last section of the plan.

2.0 SITE HISTORY

Conservation Chemical began its operation at its present location in April of 1967. The facility was owned and operated

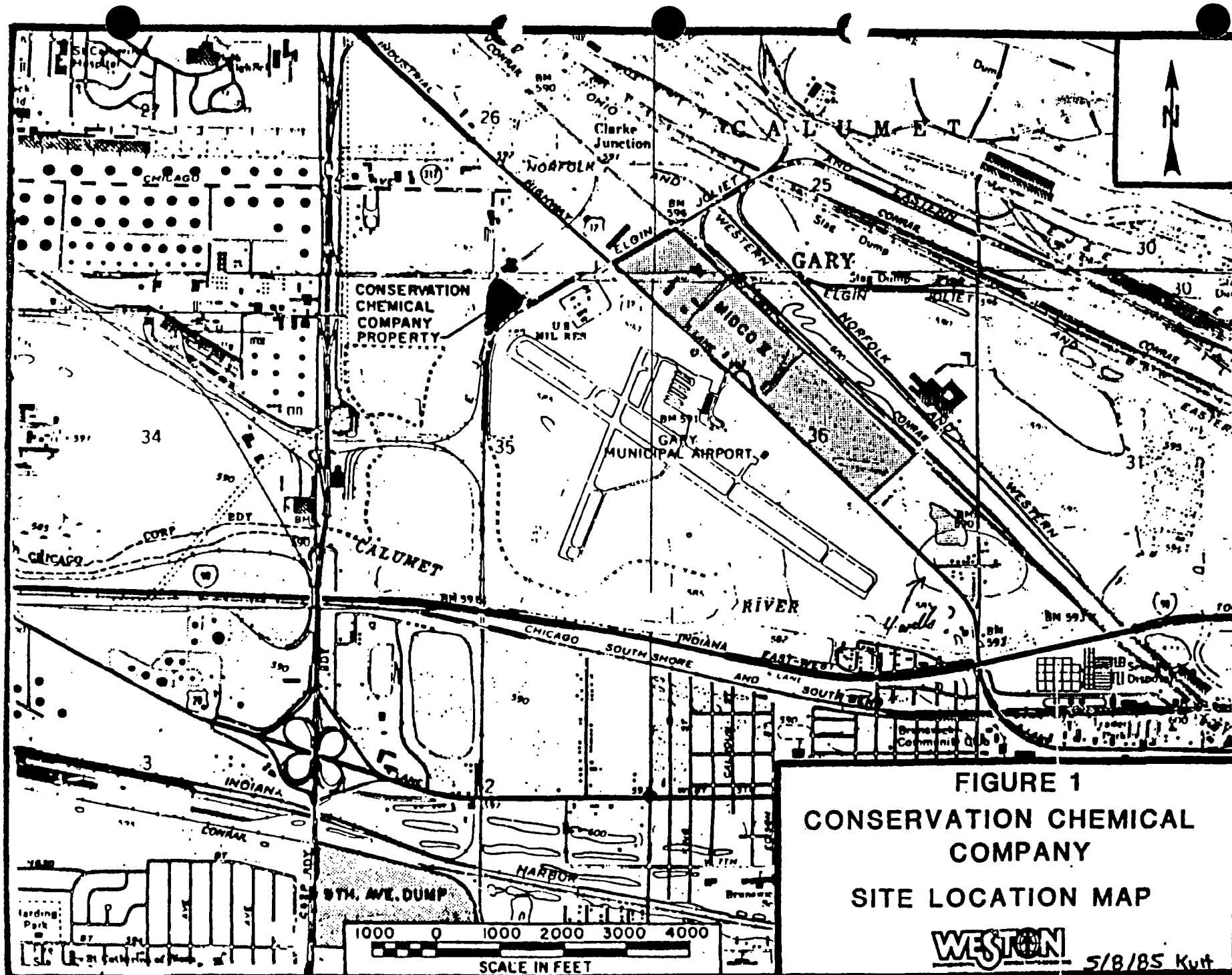
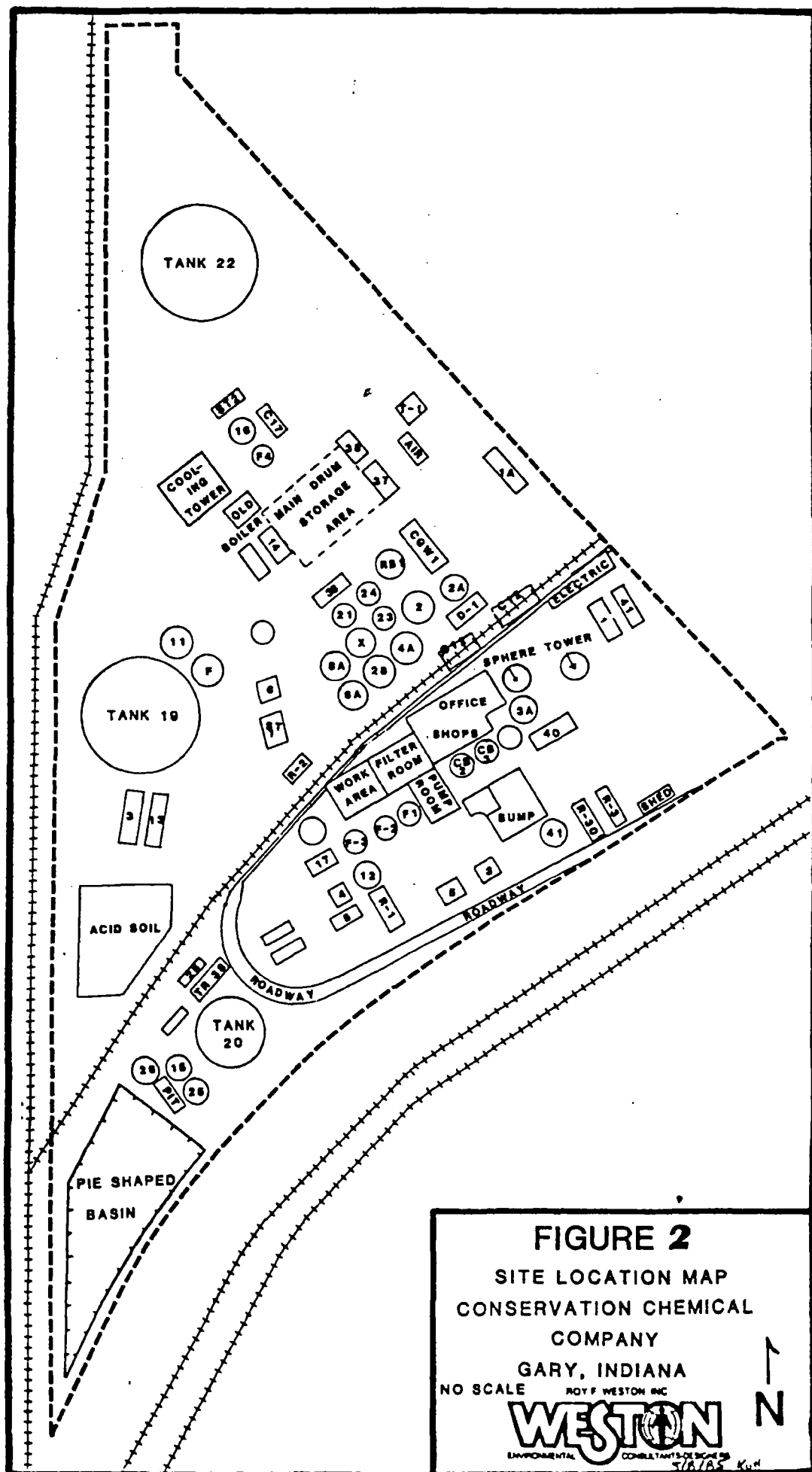


FIGURE 1
CONSERVATION CHEMICAL
COMPANY
SITE LOCATION MAP





by the Berry Oil Company prior to 1967 as a petroleum oil refinery. A number of drums and tanks now utilized by Conservation Chemical were left over from the time the site functioned as a refinery. Other remnants remaining on site also include the office/shop building, two concrete-lined pits, a distillation column, a forced draft cooling tower, and a waste disposal pit (Figure 2). The disposal pit, referred to as the pie-shaped basin, is located at the southern apex of the site. The basin initially functioned as part of the wastewater treatment system devised for the refinery; it was also employed as a disposal pit by both the refinery and Conservation Chemical. According to the owner of Conservation Chemical, Mr. Norman Hjersted, the significant quantity of waste oils that presently exist on site are residual materials left from the refinery operation.

The first eight years Conservation Chemical was in operation, from 1967 to 1975, the facility operated as a producer of ferric chloride, which was marketed as a coagulant for wastewater treatment plants. In 1975, the company ceased production of ferric chloride and began to operate as a hazardous waste terminal and treatment facility. At that time, the facility's primary method of treatment involved waste neutralization. The cyanide waste that is presently stored on site resulted from this period when the site operated as a treatment facility. Conservation Chemical was forced into cessation of its hazardous waste activities as a direct result of its inability to comply with federal government hazardous waste regulations. Following its abandonment of hazardous waste activities, the company redesigned the plant for reinstatement of its ferric chloride production.

3.0 FACILITY DESCRIPTION AND CURRENT ON-SITE ACTIVITIES

3.1 Drum and Tank Storage

The Conservation Chemical facility contains numerous bulk tanks of various sizes that are presently used only for storage purposes and are not involved in the process activities. In addition to the tanks, approximately 300 drums exist on site (Tables 1 and 2). A total of 13 storage tanks, containing metal-laden cyanide-contaminated liquid wastes, exist on site and were generated from metal plating operations. Concentrations of cyanide range between 50 parts per million (ppm) and 2.5%. The majority of the cyanide waste storage tanks are located along the northwest side of the railroad spur directly across from the office/shop building. Two other cyanide storage tanks are positioned directly adjacent to the office/shop building, which are the spherical tank and the cracking tower. Many of the tanks exhibit highly

TABLE 1

TANK INVENTORY OF CONSERVATION CHEMICAL AS OF FEBRUARY 4, 1985¹

<u>Tank Number</u>	<u>Contents</u>	<u>Capacity (gal)</u>	<u>Quantity (gal)</u>
CB-2 and TUB	Ferrous chloride	16,200	8060
CB-3 and TUB	In process	16,200	N/A
3-A	Ferric chloride	21,400	13,603
R-3	Ferrous chloride	10,250	N/A
R-30	Ferrous chloride	7000	6700
12	Ferrous chloride	12,200	10,415
F-1	In process	21,000	21,000
F-2	Ferric chloride	21,000	8348
F-3	Ferrous chloride	14,000	N/A
RR-1	Ferrous chloride	8500	6450
40	Hydrochloric acid	15,500	10,544
41	Hydrochloric acid	15,500	N/A
1	To be used for storage		
17	To be used for storage		
Rail car 82996	Chlorine	N/A	180,000
Rail car 75242	Chlorine	N/A	14,453
Rail car 75423	Ferric chloride	N/A	15,969
R-15	Waste acid	8000	Empty
R-31	Waste acid	8000	Unusable
R-38	Waste acid	2400	N/A
20	Neutral acid sludge	420,000	242,760
5	Silica etch	121,000	3000
2	Solvent	462,000	43,600
D-1	Solvent	120,000	9000
15	Solvent	234,000	5780
25	Solvent	172,000	161,000
19	Oil and water sludge	842,000	13,992
22	Asphaltic fuel oil	1,464,685	137,514
F-11	Dirt and solvent spill	6000	5200
Sphere	Cyanide	22,800	7700
Tower	Cyanide	30,000	8500
RR2	Cyanide	10,000	6000
TR38	Cyanide	6500	1500
ST1	Cyanide	20,000	18,000
DB1	Cyanide	120,000	2235
2A	Cyanide	21,400	11,637
4A	Cyanide	21,400	20,900
8A	Cyanide	17,625	17,000
26	Cyanide	14,350	11,115
28	Cyanide	19,100	18,781
23	Cyanide	19,100	11,000
X	Cyanide	19,430	12,953
CY1	Sludge	22,100	1473

¹ Information obtained from dated inventory sheet supplied by Conservation Chemical.

TABLE 2

DRUM AND VARIOUS CONTAINER INVENTORY
CONSERVATION CHEMICAL COMPANY¹

<u>Container Content Description</u>	<u>Quantity</u>
Empty cyanide sludge drums	N/A
Empty plastic container	16
Empty plastic container with tops removed	10
Large oil containers	3
Large empty containers	3
Five gallon paint pails	2
Five-gallon bottles	4
Acid in brown plastic container	1
HF in blue plastic container	1
Paint in 1 gallon and 5 gallon pails	4
Fiberglass crystals/drum	1
Unknown drummed material	2
Iron filings/drum	1
White paste/drum	1
Water (?)/drum	3
Soil, lime, and neutralized nitric sludge/recovery drum	1
Lapping oil/drum	22
Acid (?)/drum	1
Irodite/drum	1
White crystals/drum	5
Green crystals/drum	2
Black and orange material/drum	2
Red material-soil (cobalt?)	N/A
Plastic chrome/drum	N/A
Paint sludge/drum	8
Copper crystals (acid)/drum	19
Lab chemicals/drum	14
Filer aid (?)/drum	1
Solvent contamination soil/drum	24
Overpacked material (?)	19
Tiles/overpack	15
Empty/drum	2
Cyanide-contaminated soil/drum	7
Cyanide (?) -contaminated material/drum	2

¹ Information supplied by Conservation Chemical; total of 154 drums with material and 110 drums are empty.

deteriorating conditions as evident by punctures in the side and along the top of the tanks. Many of the tanks exhibit extensive rusting; several of the tanks have had their tops partially destroyed (tanks #19 and #20). The manways on several of the tanks had been resealed with fiberglass due to the potential of leakage around the seams. The three large refinery-size storage tanks (tanks #19, #20 and #22) accommodate a variety of types of material. Tank #22 contains approximately 137,514 gallons of asphaltic fuel oil that is contaminated with PCBs at levels between 45 ppm to 76 ppm. The tank appears to be in good condition and has had no reported leakage. Tank #19 currently holds approximately 25,000 gallons of a material that is believed to be number six fuel oil; this material is also contaminated with PCBs at a high end level of 1256 ppm. Tank #19 has had a chronic leaking problem; the viscosity of the material, however, has limited the distance material has moved from the tank. Adjacent to tank #19 exists a neutralized acid waste lagoon which accepts process waste from the sump located directly behind the office/shop building. The remaining refinery-size tank (#20) is located just north of the pie-shaped basin. Tank #20 contains neutralized acid waste, which is similar to the material in the pie-shaped basin. The tank is in poor condition and has had reported quantities of leakage. A pit is presently being excavated adjacent to the tank in an effort for compliance under the Spill Prevention and Countermeasure Contingency Plan regulations (40 CFR 112.7).

The drum storage area is located just northwest of the cyanide storage tanks; approximately 264 drums are staged in this area. According to the facility's inventory sheet, 110 of these drums are empty. Many of the drums have been overpacked; the majority of the drums are not placarded.

The majority of the tanks that are located directly behind and adjacent to the office/shop building are involved in process and are generally in good condition. These tanks basically contain either ferric chloride, ferrous chloride, or hydrochloric acid; their quantities are continually changing due to process involvement. Several recently purchased empty tanks are staged in this area; they are slated to replace the more highly deteriorated tanks. Rail tank cars are periodically brought onto the site by the rail spur for raw material delivery (chlorine) or product material transport (ferric chloride).

3.2 Pie-Shaped Basin

The pie-shaped basin is located at the southern apex of the Conservation Chemical property and encompasses approximately

90 square feet of land. Presently, the basin has been abandoned and is no longer used for dumping or disposal. It was originally employed as a settling lagoon for the disposal of hazardous waste materials and oil products. The surface of the basin was elevated approximately four feet above grade in an apparent effort to ensure infiltration into the shallow water table (Havens and Emerson, 1983). The basin contains an estimated 600,000 gallons of refinery waste emulsions, neutralized pickling liquor waste, and a variety of noncharacterized hazardous waste.

4.0 PRESENT SITE ACTIVITY

Currently, the active manufacturing process conducted at Conservation Chemical involves the production of iron-salt coagulants, primarily ferric chloride. The ferric chloride product is marketed to waste treatment plants as a chemical precipitant for phosphorous removal. The process method entails the control reaction of ferrous chloride waste pickling liquor with chlorine and scrap iron. The pickling liquor is concentrated by thermal evaporation and air oxidized; the chlorine is reacted with the ferrous chloride which produces ferric chloride. Simply stated, the conversion results from an overabundance of chlorine atoms in contact with the ferrous chloride. The scrap iron was initially included in the process to remove the free acidity by conversion of the iron salts; however, the scrap iron's primary purpose is to increase the specific gravity to a level required for the reaction to occur.

The waste pickling liquor handled at the facility is generated principally from the steel mill industry in the surrounding area. Pickling lines are utilized in steel mills to remove scales that form on the metal as a result of the rolling process. The scales have to be eliminated to prevent a lack of uniformity and irregularities on the metal surface. Continuous picklers will utilize either hydrochloric acid or sulfuric acid in their process. A ferrous chloride waste material results from a pickling process employing hydrochloric acid; the scales are dissolved in the acid producing the ferrous chloride. When the ferrous chloride reaches a concentration of 18% to 20%, the pickling acid is no longer efficient and the liquor must be discharged. The spent pickling liquor, in general, contains free hydrochloric acid, ferrous chloride and water.

5.0 AREA GEOLOGY AND SITE HYDROLOGY

The surface geology in the area of Conservation Chemical is characterized by a generally flat topography. The facility is within the confines of the Calumet Lacustrine Plain, that



is characterized by, and to a limited extent, dunes and beach ridges. The surficial geology is composed of 150 feet of unconsolidated glacial deposits; these deposits overlay a bedrock dominated by closely jointed dolomites and cherty limestone of Middle Silurian Age.

The top 50 feet of the glacial till deposits are composed of glacial lacustrine sands and gravels. The distinctive character of the deposits are exhibited as sand bars, spits, beach ridges and dunes. This shallow unit, as described, is part of a larger unit referred to as the Atherton Formation. Approximately 100 feet beneath the 50 foot top unit extends a stratum that is composed chiefly of a pebbly, sandy and silty clay fill, in addition to discontinuous seams of sand and gravel.

The surface soils on the site have been disturbed extensively due to the various construction activities undertaken at the site. Large amounts of fill material, such as slag, cinders and dirt, dominate the shallow soils. According to the local soil survey map, the indigenous soils at the site are classified as the Oakville-Tawas complex which consists of 45% Oakville fine sand, 45% Tawas muck over fine sand, and 10% Maumee loamy fine sand. The permeabilities of the complex range from 4.4×10^{-4} to 1.4×10^{-3} cm/sec in the muck to greater than 1.4×10^{-2} cm/sec in the fine sand.

Surface water drainage on the site moves on a shallow grade towards the southwest. The Grand Calumet River flows approximately one mile south of the site and would, theoretically, receive surface run-off from the site should a continuous flow be possible. The area tends to experience extensive ponding; marshes are frequent throughout the entire vicinity. The lack of a significant topographic gradient and the highly permeable soils reduces the potential for any extensive surface water flows.

The nature of ground water movement in the area of the site is difficult to define. The existence of a ground water divide is believed to be located quite near the immediate vicinity of the site. Subsequently, ground water moves in either a northward direction towards Lake Michigan, or southward to the Grand Calumet River. As of the present, no determination has been made as to which watershed the site is in. The water table has been estimated to occur at approximately 12 feet beneath the surface and the shallow aquifer is unconfined. This aquifer is referred to as the, as the

7 during the addition of the hypochlorite. Formation of chlorine gas would be possible because the solution would no longer be in an oxidizing environment necessary to maintain chlorine consumption. Chlorine and hydrogen cyanide monotox units are recommended for monitoring in the area of the treatment tanks.

In summary, the treatment system will be employed if majority of the cyanide waste on site is treatable. Preliminary laboratory analysis should be performed on composite waste samples to determine the treatability of the material. The treatment system was designed for a "worst case" situation. It is possible that solid cyanide will not require treatment. If that was found to be the case, then tank #1 phase of the treatment would be eliminated. An itemized listing of costs and a work schedule is included in Section 8.2.

7.1.2.1 Treatment Procedures

Phase I Treatment: Solid Cyanide Destruction (Tank #1)

- o Raise pH to 10-11 using lime (Ca(OH)_2) followed by rapid mixing for 5-10 minutes.
- o Add hypochlorite (NaOCl) to excess on starch iodide paper and rapid mix for 5-10 minutes.
- o Allow sludge optimal time for settling.
- o Resultant slurry is then filtered through plate and frame filter press.
- o Solids are removed from press for disposal to a secure landfill.

Phase II Treatment: Dissolved Cyanide Destruction and Chromium Reduction

- o Raise pH in tank #2 to 10-11 using lime (Ca(OH)_2).
- o Add hypochlorite (NaOCl) to excess on starch iodide paper followed by rapid mixing for 5-10 minutes.
- o Chromium reduction will be accomplished through decrease in pH to 7.0 by addition of sulfuric acid. Solution will be in a reducing state.
- o Sodium bisulfite is added in excess followed by rapid mixing. As a result, the pH will be lowered to 5.5-6.0.



Calumet Aquifer; its saturated thickness is approximately 50 feet. Ground water recharge results from direct infiltration from rain and surface run-off. The base of the aquifer is composed of an underlying clay till unit; this unit exhibits an average permeability of 1.4×10^{-7} cm/sec.

6.0 IMMINENT THREATS TO THE ENVIRONMENT AND HUMAN HEALTH

6.1 Cyanide Release Potential

The present condition of the Conservation Chemical facility predisposes the site to a potentially severe release of several varieties of hazardous materials. The most widespread material on site, and undoubtedly the most hazardous, is the cyanide liquid waste. Approximately 147,321 gallons of cyanide liquid exist on site in 13 separate tanks. Table 1 lists each tank's capacity and current volume. The majority of the waste was generated during the period when Conservation Chemical operated as a hazardous waste treatment and transfer facility. The cyanide material has existed on the site for at least ten years. Visible inspections of the cyanide tanks appeared to indicate that several of these tanks are in deteriorated condition. Integrity of several of the tank manways were questionable during a recent site inspection; condensate was observed to be collected around the seams of the manways. The plant manager indicated that several of the seams had been resealed with fiberglass. In addition, the plant manager indicated that a significant cyanide liquid spill occurred over a year ago due to the failure of the valve on tank #8. The release resulted from the tank valve and the fittings being made of brass; cyanide will readily attack brass causing extensive corrosion. As a result of the corroded valve, approximately 200 gallons of cyanide liquid was released. The remaining material in the tank was pumped into another tank and a steel valve was retrofitted to replace the brass valve. The contaminated soils around the tank were treated in-situ with a hypochlorite solution. The plant manager also indicated that during routine transfer of cyanide liquids, spills would unavoidably occur and subsequent hypochlorite treatment of the soils would be necessary. The occurrence of leaking cyanide tanks on site is not an isolated event. During a recent site inspection, one of the cyanide tanks had a small leak at its base; a metal bucket was placed under the leak to collect the material. Hypochlorite is readily available and frequently dispensed on soils at the site due to the relatively persistent releases of cyanide liquid. These quantities, in most instances, are relatively small. The potential does appear high for a major cyanide liquid release, given the conditions of the storage tanks now in service.

6.1.1 Cyanide Health Hazards

A cyanide release at the site would endanger the health and welfare of the workers in the direct vicinity. The release of cyanide vapor is most common in the presence of acids, which liberates a hydrogen cyanide (HCN) vapor. HCN is a rapidly acting poison (Hamilton and Hardy, 1974). The direct action of the cyanide ion in the body results in the paralysis of the respiratory enzyme cytochrome oxidase. This action is shared by all inorganic cyanide salts. The behavior of the cyanide ion prevents the uptake of oxygen by the tissues with resulting asphyxial death. The blood itself, saturated with oxygen, remains arterial in color after it reaches the venous circulation, producing a characteristic cherry-color appearance of the victim of acute cyanide poisoning. The cyanide ion is absorbed from all tissues; cyanide can be readily absorbed through the skin. The currently accepted threshold limit value (TLV) for HCN and cyanogen in the United State is 10 ppm.

6.2 PCB Storage and Health Considerations

The materials in tanks #19 and #22 have been identified as PCB contaminated. A total of 495,850 gallons of PCB-contaminated material is estimated to be on site. Tank #22 appears to be structurally sound and not in danger of failure; however, tank #19 has a past history of leakage. Tank #19 presently stores approximately 191,000 gallons of water and fuel oil. The fuel oil is contaminated with PCBs and is estimated to exist at a volume of 25,000 gallons. It is believed that all 470,850 gallons of the oil/asphalt mixture in tank #20 is contaminated with PCBs. #22

During the recent inspection, material from tank #19 was evident along the base of the tank. The viscous nature of material in tank #19 prevents it from rapid migration away from the tank. The PCBs in tank #19 have been identified as Arochlor 1254 in concentrations between 100 and 1200 ppm.

PCBs are considered a hazard to health at extremely low levels. They are known to decompose slowly over a period of several decades. PCBs are persistent in the environment due to their being highly insoluble in water, in addition to their carbon content being largely nonconsumable by bacteria. PCBs that enter lakes and rivers are generally associated with fine particulate matter suspended in water and contained in bottom sediments. These sediments act as a reservoir over a prolonged period from which PCBs may slowly be released. Fish and various other aquatic organisms are exposed to PCBs through water and sediments. Bioaccumulation of PCBs occurs due to uptake and storage of the material in the fatty tissues of organisms.



Human exposure to PCBs can occur through various means. Routes of contamination include food chain transmission (mainly through PCBs in fish), and industrial accidents, such as leakage or spillage of PCB-containing fluids. PCBs can enter the body through the skin, lungs, and gastrointestinal tract. Following the absorption of PCBs into the body, distribution throughout the body includes the blood, fatty tissues, and several organs including the liver, kidneys, lungs, adrenal glands, heart, skin, and brain. Historical toxicological evidence has shown that PCBs can cause:

- o Chloroacne and hepatotoxic effects in humans.
- o Miscarriages, still births, and transplacental transmission in an abnormal pigmentation.
- o PCB residues in human adipose tissue, serum, and milk.
- o Health effects have been shown to manifest into acne-form lesions, around the eyes (chlorinated naphthalenes), anorexia, nausea, headache, abnormal pain, insomnia, and disturbance in taste.
- o Arochlor 1254 has been shown to be carcinogenic in male mice, producing tumors and lesions in the livers of the mice.

6.3 Neutral Acid Waste Material and Potential Environmental Threats

Tank #20 contains approximately 412,504 gallons of material referred to as "Neutral Acid Waste," which resulted from neutralization of waste pickling liquor. The material is dominated by percentage quantities of iron, chromium, copper, zinc, and nickel. Inspection of the tank has shown it to be in poor condition and portions of the top of the tank have been destroyed allowing rain water and snow to enter the tank. In addition, the tank has a past history of leakage.

The potential dangers presented by tank #20 involves primarily the quantity of hazardous material in the tank and the deteriorated condition of the tank. The high concentration of metals in the tank poses a significant threat to the surrounding environment; the large volume of material involved would ensure a large area to be contaminated should the tank fail. The metals could potentially, at their present concentration, create acute hazardous conditions for workers who would come in contact with spillage. Potential excessive ground water contamination is also a concern should the tank

fail. Although the shallow ground water aquifer (the Calumet Aquifer) is not a significant drinking water resource, a large volume of contaminant migration could eventually lead to the Grand Calumet River or Lake Michigan. This would prove to be a endangerment to aquatic life.

6.4 Waste Solvent Material and Potential Health Hazards

Tanks #15 and #25 present a significant hazard due to the volume of material present and the nature of the material involved. The material is a combination of a variety of chlorinated hydrocarbons that were mostly generated as solvents. The tanks are located directly adjacent to and just south of tank #20. The tanks contain a combined total of 33,300 gallons of solvent material that is dominated primarily by a methylene chloride-hydrocarbon mixture. Analyses have shown the organic chloride content ranges from 8.5% to 14.5%. The condition of the two tanks is highly suspect due to the corroded appearance along the outside of the tanks.

The most abundant type of the hydrocarbon is methylene chloride. Most chlorinated hydrocarbons (e.g., methylene chloride) encountered in industry are extremely volatile a property which permits a hazardous exposure to occur more rapidly than one might anticipate. A characteristic property of all the members of the chlorinated hydrocarbon series is the ability to depress the central nervous system leading through the several stages of clinical anesthesia ultimately to death from respiratory paralysis. The generally observed phenomena in humans, typical of the material, include: dizziness, confusion, drowsiness, nausea, vomiting, and occasionally, abdominal pain. There may be visual disturbances. Deep anesthesia may lead to death from respiratory depression or circulatory failure. Actual anesthesia is probable should spillage or gross misuse of the material cause inhalation of vapors. Reports have documented the sudden death of healthy individuals who had been exposed to chlorinated hydrocarbons of relatively low toxicity. The deaths are believed to be possibly caused by transient ventricular fibrillation due to evidence that chlorinated hydrocarbons sensitize the myocardium to the effects of endogenous epinephrine. Prolonged contact with the solvents on the skin can result in extreme dryness and fissuring with associated infection. Immersion of the fingers in methylene chloride leads to severe pain with transient numbness. As evident, these materials pose substantial hazards should tank failure occur.

7.0 RECOMMENDED REMOVAL ACTIONS

The removal actions proposed for the Conservation Chemical facility are intended to mitigate the imminent hazards and threats described in Section 6.0 of this EAP. The materials on site addressed for cleanup have been segregated into four separate waste streams which are as follows:

- o Cyanide-contaminated liquids and sludges;
- o PCB-contaminated oils in tanks #19 and #22;
- o Neutral waste acid in tank #20;
- o Chlorinated hydrocarbon material in tanks #15 and #25.

Each waste stream will be addressed and treated individually for handling and removal recommendations. Alternatives will be provided for materials that can be cost-effectively treated in-situ. Projected cost estimates and time schedules will be determined for each waste stream removal.

7.1 Cyanide Removal and Metal Treatment: In-Situ Treatment

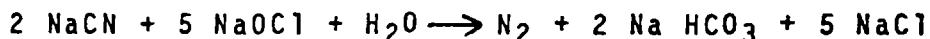
Approximately 150,000 gallons of cyanide liquid waste exist on site in 13 separate tanks. Currently no determination has been made to the amount of sludge present in the tanks. The concentrations of the cyanides range between 62 ppm and 19,925 ppm; the vast majority of the cyanides are complexed with metals which resulted from the waste being generated from the electroplating industry. Ostensibly, the most common metal-cyanide complexes are copper, chromium, zinc, nickel, and cadmium.

Prior to the initiation of an in-situ treatment system, design criteria have to be addressed and the determination of whether the material is treatable. Material sampling will be conducted to obtain representative samples of the cyanide waste throughout each tank. Analysis will determine the treatability of the cyanide; it will be presumed here that the majority of the material is treatable. Alternate disposal methods will be provided in Section 7.5 for cyanide material decidedly not treatable. Cyanide waste that will be considered not treatable includes cyanide concentrations of 2% or greater, and selected metal complexes that are not amenable to treatment.

The on-site treatment of the cyanide may provide a cost-efficient and effective method of complete cyanide destruction. The amount of cyanide treated will be dependent on the chemical characteristics of the material--whether it is amenable cyanide.

At this point, it is anticipated that following the complete treatment of the cyanide waste, the resulting effluent will be disposed at the municipal treatment plant in Gary, Indiana. This will require not only total destruction of the cyanide, but also removal of the metals to acceptable levels of the treatment plant. The in situ treatment system involves two stages. The primary stage concerns the treatment and removal of suspended solids containing high concentration levels of cyanide. The secondary stage of the treatment involves the destruction of the remaining cyanide in the liquid and the removal of heavy metals from the waste. In order to prevent a release of HCN vapors, the cyanide amenable to chlorination must be destroyed prior to pH adjustment with the strong acid.

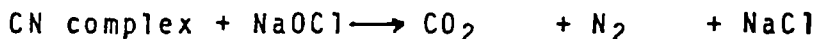
Destruction of cyanide may be undertaken by several methods. The method of choice for in-situ treatment will be destruction with hypochlorite. The treatment, simply stated, is completed by oxidation of the cyanide ion by chlorination. The cyanide radical, CN, is disrupted with the carbon atom being converted to carbonate (CO₂) and the nitrogen atom to nitrogen gas (N₂). The CN will be treated with a sodium hypochlorite (NaOCl) solution. The reaction is analogous to a chlorine gas reaction with cyanide in an alkaline medium; the reaction with a sodium cyanide mixture would be as follows:



The treatment must be conducted at a pH of between 10 and 11. To maintain the pH sodium hydroxide will be added to the treatment solution. Plating waste inherently will have between 2% to 10% solids which will have to be treated and removed prior to the liquid treatment.

7.1.1 Treatment System for Cyanide and Heavy Metals

The treatment of complexed cyanide will be undertaken with sodium hypochlorite solution. The reaction of sodium hypochlorite with cyanide will, in general, liberate N₂ and CO₂, as in the following equation:



The reaction occurs optimally at a pH of 10 to 11 and at atmospheric temperature and pressure. At this pH level, the solubility of cyanide particles is low. It is desirable to treat insoluble solid cyanide separately from dissolved cyanide in sludges that contain 2% cyanide solids or greater.

Treatment of the metals will be conducted sequentially in association with the cyanide destruction. The majority of the metals will be removed through precipitation using a chemical flocculant. Chromium, however, will be treated differently than the other metals. The chromium on site at Conservation Chemical is in a hexavalent state which is highly toxic to aquatic life even at low concentrations. The hexavalent chromium will have to be reduced to trivalent chromium prior to discharge. Unlike other metals, hexavalent chromium is soluble through the entire range of pH. The method of choice for reduction will be treatment with sodium bisulfate. The reduction treatment will entail lowering the solution pH to 3 or below with sulfuric acid. This will be followed by a conversion of chromium to the trivalent state using sodium bisulfite. The trivalent chromium will be precipitated out of solution using lime or a caustic soda. Precipitation is most effective at a pH range of 8.5 to 9.5, which is a result of the low solubility of the chromic hydroxide at that pH range. It is recommended that bench scale tests be performed to determine the treatability of the hexavalent chromium prior to commencing on-site treatment.

The treatment of copper will also require a pH adjustment to break down the copper complexes. This will be accomplished with a strong acid such as H_2SO_4 . The next step involves the reaction with NaOH to produce a copper hydroxide precipitate which will settle out of solution.

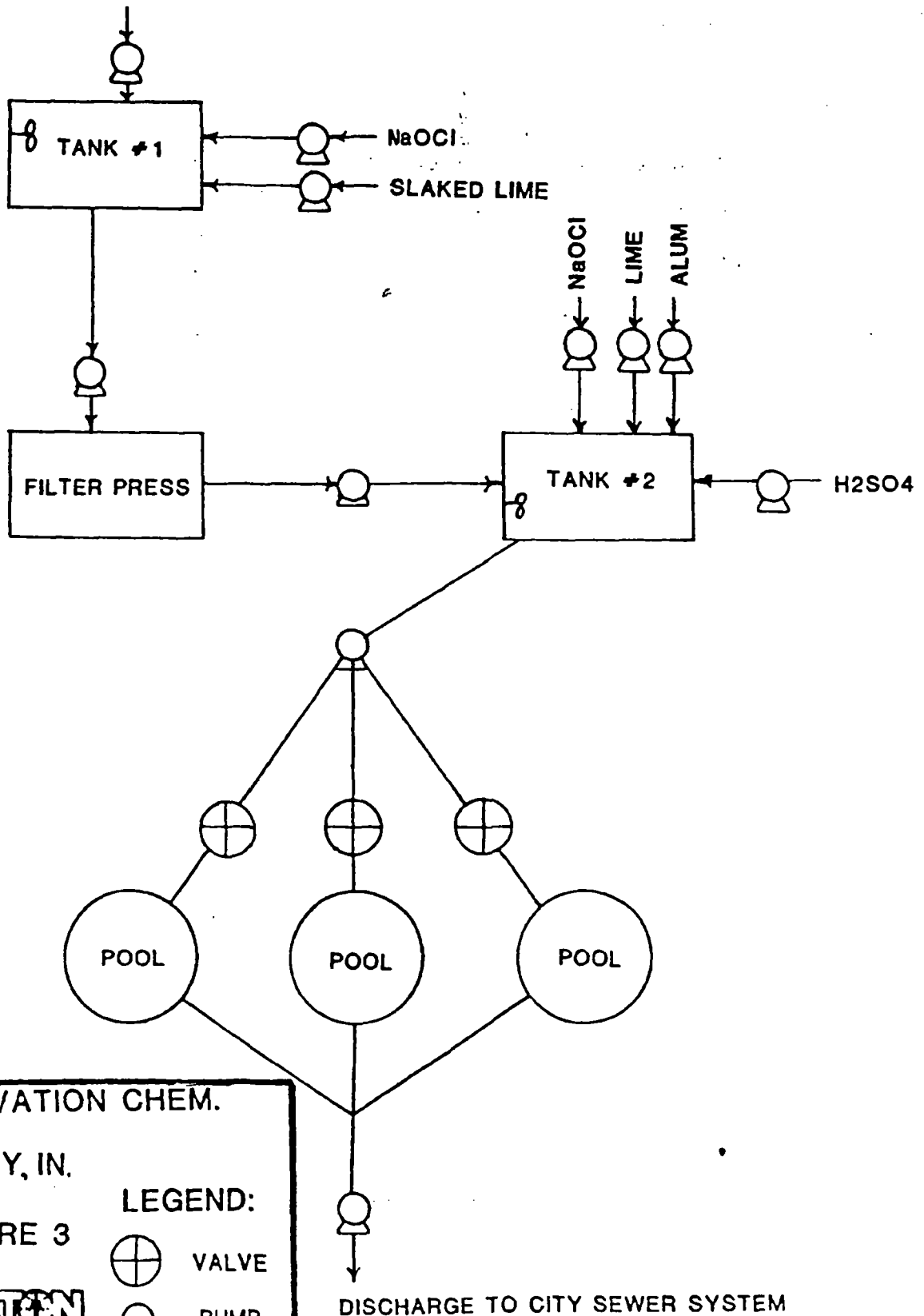
Other heavy metals such as nickel, zinc, and cadmium, will be treated by means of chemical precipitation. Alkaline conditions will be achieved through the addition of lime; insoluble metal hydroxides will form upon the addition of the lime. As previously mentioned, precipitate formation is generally most effective at a pH range of 10 to 11. Solubility of metals is dependent upon pH; the lower the solubilities, the greater the efficiency of the treatment. The range of pH indicated will usually assure a minimum solubility of the metals in solution.

7.1.2 Treatment Description for Cyanide Destruction and Metals Treatment

A schematic (Figure 3) has been prepared to describe the step-by-step procedure for the treatment system. The tanks used for the treatment will be open-top lined sludge boxes. The destruction of high level concentrations of cyanide contained in waste solids will be completed in Tank #1. The initial step will involve pH adjustment to 10 by rapid mixing the lime ($Ca(OH)_2$) into solution. The cyanide destruction will result by means of oxidation using a sodium hypochlorite bleach ($NaOCl$). The resulting sludge material, which is cyanide free, will be pumped into a filter press which separates liquids from solids containing heavy metals. The solids will

CYANIDE WASTE TREATMENT SYSTEM

WASTE SLUDGE INPUT



CONSERVATION CHEM.

GARY, IN.

FIGURE 3

WESTON
CONSULTANTS & ENGINEERS

LEGEND:



VALVE



PUMP

KvH 5/8/85



be suitable for landfilling at a secure hazardous landfill. The resulting liquid effluent will be pumped into tank #2 and treated for dissolved cyanide and metals. The treatment of cyanide liquid in tank #2 will be similar to the treatment in tank #1. Following the cyanide destruction in tank #2, using hypochlorite, the hexavalent chromium will be treated by reduction to trivalent chromium. For this treatment, the pH will be lowered to a reducing environment (< pH of 7) by addition of sulfuric acid (H_2SO_4). Reduction of the hexavalent chromium is accomplished by the addition of sodium bisulfite. Spot tests for hexavalent chromium will indicate at which point only trivalent chromium remains in the solution. Rapid mixing of the solution is required for an efficient reaction. The pH should drop to approximately 5.5 during the reduction of hexavalent chromium.

Following the complete reduction of hexavalent chromium, the pH of the solution is decreased further to about 4.0 by addition of sulfuric acid. A chemical flocculant (alum) is added simultaneously. The copper complexes will break down at these conditions which renders the copper free for treatment with a caustic soda (lime). As a result of the elevated pH (approximately 10 to 11), metal hydroxide precipitates will settle out of solution after a short period of rapid mixing. Tank #2 will be equipped with two rotating arms located at the bottom of the tank which will be used to collect the solids that settled out of solution. The remaining liquids in the tank will be pumped into a sand filter to remove fine particulates that did not settle out of solution. Holding pools will be utilized for temporary storage of the treated liquid prior to discharge.

The treatment design was devised as a batch process where reaction rates occur very rapidly with relatively low concentration of reactants. Consequently, batch volumes can be as great as handling equipment permits. Optimal batch size would be in the area of 10,000 gallons. Constraints on batch size would be controlled by the type of filters employed. Time per batch for the treatment would require approximately six hours.

Several safety precautions will be required during treatment system operation. Personnel working around the treatment tanks will be equipped with Level C protection at all times. Potential releases of hydrogen cyanide and chlorine gas exist during the reaction of treatment chemicals including hypochlorite, sulfuric acid, and caustic soda. Continuous pH monitoring must be undertaken; the maintaining of appropriate pH levels during the various phases of the treatment will prevent accidental vapor releases. One example of a potential release would occur if the pH were allowed to fall below

- o Addition of sulfuric acid and alum in equal proportions will reduce pH to 4.0. Copper complexes will break down.
- o The pH will be increased to 10-11 with caustic soda (NaOH) and lime followed by rapid mixing. Dissolved metals will form metal hydroxides which will settle out of solution under the alkaline conditions.

7.1.2.2 Treatment Process Considerations

Several considerations are necessary when undertaking the process for successful treatment:

- o During the first phase treatment, it is important that the hypochlorite be in excess to completely oxidize the cyanide, which will generate carbon dioxide and nitrogen gas.
- o Sufficient settling time must be allowed following mixing to assure optimal solid removal.
- o Lime would be the material of choice for the creation of a good filter cake in the press. Sodium hydroxide (NaOH) will also work, but will create a more gummy cake which could result in material handling problems.
- o During the second phase treatment, hexavalent chromium will be reduced only under neutral or acidic conditions. Sodium bisulfite must be present in excess for complete reduction.

7.2 PCB Disposal

7.2.1 Disposal of PCBs in Tank #19

A considerable volume of PCB-contaminated oil exists at the Conservation Chemical facility. Tank #19 has approximately 191,000 gallons of a combined mixture of oil sludge and water. It is estimated that only 25,000 gallons of the mixture is oil. The partially destroyed top to the tank has allowed additional water to collect in the tank. The water fraction of the mixture will be sampled for PCB analysis; if the water shows to be clean, it will be left on site. Should the water be contaminated, it will be disposed. For the purpose of cost estimation, it will be assumed that the water will not be required to be disposed. The 25,000 gallons of oil is believed to have the same viscosity as #5 fuel oil; this will present a difficult materials handling problem.



It is anticipated that a high-powered section pump will be required to remove the oil from the tank. This task will be undertaken using a "supersucker" for transfer of material into over-the-road tankers. Access into tank #19 will require the cutting of a large manway in the side of the tank. Sounding of the tank has indicated that the oil/water level is approximately five feet from the bottom of the tank. A manway will be constructed several feet above this level. It is recommended that the manway be cold-cut to prevent the possibility of vapor ignition. It is estimated that it will take a total of seven working days to complete the oil removal from tank #19. Following the transfer of the material into the tankers, each tanker will be analyzed for PCBs; the remaining water in tank #19 will also be analyzed for PCBs and treated accordingly.

7.2.2 Disposal of PCBs in Tank #22

The total quantity of 470,850 gallons of oil in tank #22 will most likely have to be moved for disposal. The material is an asphaltic oil that is very viscous, similar to #5 fuel oil. Representative samples will be taken at various levels in the tank to confirm PCB concentrations. Removal of oil from the tank will be done through the top of the tank. A "supersucker" will be utilized to transfer the material to over-the-road tankers. It is estimated that a total of 13 working days will be required to complete the task.

7.3 Solvent Removal and Disposal from Tanks #15 and #25

Tanks #15 and #25 contain a combined volume of 33,300 gallons of materials characterized as chlorinated hydrocarbon solvent with methylene chloride as the primary constituent. The organic chloride content ranges between 8.5% to 14.5%. The capacity of tank #15 is 23,400 gallons and the tank presently holds 18,200 gallons of material; tank #25 has a capacity of 17,200 gallons and presently holds 15,100 gallons of material. The tanks are, evidently, greater than three-quarters of capacity full. This may present some material handling problems; it is assumed that the valves at the bottom of the tanks are inoperable and that removal of the material will be done through the top of the tank. This will require the use of a cherry picker for access to the top of the tank and extended lengths of hose for removal of material. The material in the tanks are believed to be pumpable. A three inch trash pump should be sufficient for transfer of the material. It is anticipated that a total of five working days will be required for the removal. Three 7,500 gallon over-the-road tanks will be utilized for material transport to the treatment facility.



7.4 Neutral Waste Acid Disposal: Tank #20

Approximately 305,000 gallons of material exist in tank #20 that is described as neutral waste acid. The material resulted from the neutralization of waste pickling liquor and is believed to be similar to the material in the pie-shaped basin. It is suspected that the material has a high solid waste content which would inhibit an efficient materials transfer. Caution will have to be exercised in material handling due to the ignitable nature of the waste. Initial attempts for material transfer will be done with a high-powered vacuum pump such as the "supersucker. Should the material not be pumpable at all, a port will have to be cut in the side of the tank and the material would be removed using the bucket of a front-end loader. However, for the purposes of this EAP, it will be assumed that the material will be pumpable.

The material will be completely solidified using lime kiln dust as a solidifying agent. Solidification will be undertaken in two lined sludge boxes; two backhoes will be employed to thoroughly mix the waste. The kiln dust will be added at a 1:3 ratio with the neutral acid waste. Representative samples will be obtained prior to the treatment of the material and following solidification. The solidified waste will be removed from the site in lined dump trucks and transported to a secure landfill.

7.5 Off-Site Disposal of Cyanide Waste

In the event that the bench test laboratory analysis proves the cyanide to be untreatable, the material will either be sent to a treatment facility or a recycler. For cost estimation purposes, it will be assumed that the material is not recyclable and will be disposed at a treatment facility. Transfer of the material should encounter few difficulties; the valves on most of the tanks are operable. Should any of the tank valves not be functional, the cyanide liquid waste would be removed through the top of the tank. The material will be pumped using a three inch trash pump into tankers for transport to the treatment facility.

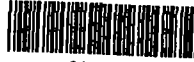
8.0 COST ESTIMATES FOR CONSERVATION CHEMICAL REMOVAL ACTION

8.1 Cleanup Support Costs

The duration of the cleanup project is estimated to last a total of ten weeks. The following sections (8.2 to 8.6) details the approximated costs per waste stream for removal and disposal. A summary of the cost estimation is provided in Section 9. All cost estimates are based on a ten-hour work day and a five-day work week.

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EPA Region 5 Records Ctr.



224912



Project No. 302114

March 87

VOLUME I

SITE ACTION PLAN

**CONSERVATION CHEMICAL COMPANY
OF ILLINOIS**

Gary, Indiana

RESPONSIVE TO THE NEEDS OF ENVIRONMENTAL MANAGEMENT

SITE ACTION PLAN

PROJECT TO REMOVE IMMINENT DANGER WASTES

TANK EMPTYING AND WASTE DISPOSAL

**CONSERVATION CHEMICAL COMPANY OF ILLINOIS SITE
GARY, INDIANA**

Prepared by:

**INTERNATIONAL TECHNOLOGY CORPORATION
March 12, 1987**

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1.0 INTRODUCTION

This Site Action Plan has been prepared by International Technology Corporation (IT) for IT and their subcontractors to conduct the project activities at the Conservation Chemical Company of Illinois (CCCI) site in Gary, Indiana (Figure 1). The remedial activities will be performed in four steps:

- o Step I - Removal and transport of cyanide liquids and dregs for off-site treatment and disposal
- o Step II - Removal and transport of acid liquids and dregs for off-site treatment and disposal
- o Step III - Removal and transport of Tank #20 sludges for off-site disposal
- o Step IV - Secure empty tanks

This plan presents the general approach to the project, including the methods to be used to rectify the existing situation, and establish the guidelines for all subcontractor work. This plan includes Site Background (Section 2.0), Project Review (Section 3.0), Work Plan (Section 4.0), Project Management (Section 5.0), Health and Safety Plan (Section 6.0), and Emergency Contingency and Response Plan (Section 7.0). A project schedule is included as Table 3.

2.0 SITE BACKGROUND

Much of the background data is from U.S. EPA and site records and has not been verified. CCCI, 6500 Industrial Highway, Gary Indiana, began operation at this location in April of 1967. Prior to 1967, the facility was owned and operated by the Berry Oil Company as a petroleum oil refinery. A number of drums and tanks currently on the site were left over from when the site was operated as a refinery. [The first eight years CCCI was in operation (1967 to 1975), the facility operated as a producer of ferric chloride, which was marketed as a coagulant for wastewater treatment plants. In 1975, the company > ceased production of ferric chloride and began to operate as a hazardous waste terminal and treatment facility. At that time, the facility's primary method of treatment involved waste neutralization. The cyanide waste that is presently stored on-site resulted when the site operated as a treatment facility. In 1980, CCCI was forced into cessation of its hazardous waste activities, reportedly as a result of its inability to comply with federal government hazardous waste regulations. CCCI then redesigned the plant for reinstatement of its ferric chloride production. The ferric chloride operation ceased in December, 1985.]

In October 1985 IT Corporation was retained to prepare a site Health and Safety Plan, a Fence Plan, and a site Sampling Plan. These plans were submitted to Region V Office of U.S. EPA and were approved. IT proceeded with implementation and constructed a fence around the site. IT next began the sampling program. Tanks defined as a part of the project were sampled for both aqueous and dreg material. These samples were then analyzed by the IT Corporation laboratory in Knoxville, Tennessee. The results of that analytical testing are attached as Appendix C.

Additional samples were then forwarded to Nelson Industrial Services in Detroit, Michigan for treatability testing. Those results are listed in Table 3. The treatability tests confirmed our suspicions that the sulfides identified in the analytical reports were in fact a false positive from the masking effect of the metals present in the samples, and were actually sulfates. With assembly of the background data completed, IT was then retained to prepare a Site Action Plan.

2.1 TANK FACILITY

The CCCI facility contains numerous above ground bulk tanks of various sizes used for storage purposes. The location of these tanks is shown in Figure 2. Physical characteristics of the tanks are listed in Table 1.

2.2 WASTE INVENTORY

The chemical analysis of the tanks reported by IT in May 1986 is presented in Table 2. A total of 13 storage tanks, containing metal-laden cyanide-contaminated liquid wastes, exist on-site and were generated from metal plating operations. Concentrations of total cyanide in the aqueous portion of these tanks range from 7,400 parts per million (ppm) to 38,000 ppm. Several of these tanks have dreg material (sludge), with relatively high concentrations of cyanide. Also, three tanks, Tanks 11, 29 and the Tower have "dry dreg" (due to being exposed to the atmosphere) that have significant quantities of total cyanide. The majority of the cyanide waste storage tanks are located along the northwest side of the railroad spur across from the office/shop building. Three other cyanide storage tanks are positioned directly adjacent to the office/shop building, and are noted as the spherical tank (Sphere), the cracking tower (Tower) and Tank 62. Another tank, Tank 21, located toward the southern apex of the site also contains cyanide.

Tanks 9, 32, 34, and 36 contain liquid acid waste and/or acid dregs. These tanks, except Tank 9, are located in the center of the site. Tank 9 is located among the cyanide containing tanks along the northwest side of the railroad spur.

Tank 20 contains sludges and is located along the southern edge of the site and just west of the office complex.

Many of the tanks exhibit deteriorating conditions, as evident by holes in the sides and along the top of the tanks.

The wastes will be removed and disposed in three steps:

- o Step I - Cyanide Wastes: Tanks 1, 3, 4, 6, 7, 8, 11 (dreg only), 12, 17, 18, 21, 29 (dreg only), 62, Tower, and Sphere
- o Step II - Acid Liquid/Dregs: Tanks 9 (dreg only), 32, 34, and 36
- o Step III - Sludge: Tank 20

The fourth step of the project will be to secure all empty tanks, as listed in Table 1.

3.0 PROJECT REVIEW

A brief review of project accomplishments is as follows:

- o Site Fencing Plan prepared and reviewed. Authorization to extend the fencing beyond property lines in order to encompass additional areas was negotiated with the railroad and one adjacent property owner.
- o Site Health and Safety Plan completed and reviewed.
- o Fence construction completed.
- o Sampling Plan prepared covering all tanks on site suspected of containing either acid or cyanide wastes. The plan called for extensive sampling of both liquid and dreg phases in each tank.
- o Sampling work was accomplished with all personnel working under Level B protection when directly in contact with the samples. Two sets of samples were collected. One was forwarded to the IT laboratory in Knoxville, Tennessee for analysis, and the second set was held on site for future treatability studies.
- o Analytical data was received from the laboratory. The tanks were categorized into three divisions based upon their contents. These divisions were (a) liquid/dreg cyanide, (b) liquid/dreg acid, and (c) sludge. The second set of samples was forwarded to Nelson Industrial Services in Detroit, Michigan for treatability study.
- o Determination was made that the cyanides and acids could be chemically treated to render them safe and the sludge could be dewatered/solidified for disposal in an approved landfill.
- o Requests for proposals were prepared for the various elements of the project, with consideration being given for both on-site and off-site treatment of the waste. A listing of the facilities contacted is included as Table 4.
- o All bids received were analyzed for technical merit and compliance with health and safety standards which would best protect site personnel and the surrounding community.

- o Final decision was made to chemically treat the cyanides and acids at an off-site location and to solidify the sludge for disposal in an approved landfill. This Site Action Plan was developed to detail the implementation of this approach.

4.0 WORK PLAN

4.1 STEP I - TRANSPORT, TREATMENT AND DISPOSAL OF CYANIDE WASTES

4.1.1 Task 1 - Mobilization

Prior to conducting tank emptying and waste hauling, the project field team will be on-site to perform the following activities:

- o Designation of contaminated areas and traffic routes
- o Construction of decontamination areas
- o Construction of truck decontamination pad
- o Setting of shower and office trailers
- o Hook-up of all utility services.

A tentative layout of the above facilities is presented in Figure 2.

This task will also serve to provide field services for Step II and Step III activities.

4.1.2 Task 2 - On-Site Transfer and Temporary Storage

This task is designed to include those activities associated with the removal of the cyanide-laden liquid, slurry and rinsate wastes from the tanks prior to transportation. It is anticipated that the liquid wastes from the various tanks will be bulked in fractionation (frac) tanks in an effort to provide economic loads for transporting to the disposal facility. This work is scheduled to be performed by _____ (to be announced).

Subtask 2.1 - Compatibility Analysis

Before wastes from individual tanks are allowed to mix in the frac tanks, compatibility tests will be performed on the tank wastes. Compatibility testing will be performed on-site or at IT's Knoxville Laboratory utilizing sample material left over from the May 1986 sampling effort.

The compatibility process will be aided greatly by hazardous categorization testing during sampling and the analytical results included in Table 2. These results provide the following tentative groupings:

o Cyanide - Liquids - Step I

Tanks 1, 3, 4, 6, 7, 8, 12, 17, 18, 21, 62, Tower and Sphere.

- Tank 17 due to its Volatile Organic Compound (VOC) concentration may be separated out from this group.
- Dregs in these tanks may also be compatible.

o Cyanide - Dregs - Step I

Tanks 11, 29, and Tower.

- Tower dreg may not become part of a slurry. Its removal may, therefore, change the scope of work.

Sampling of frac tanks conducted during the project will generally follow the guidelines contained in the final Sampling Plan attached as Appendix B.

Samples from frac tanks will be collected through the manway located on top of the tanks. Approximately a quart volume of material will be obtained. The sample bottle will be clearly labeled and will be packaged for shipment according to all applicable transportation rules and regulations. A chain-of-custody form will accompany the sample to the treatment/disposal facility. The facility will analyze the sample to determine its conformance with the previously approved waste stream. It will be the IT Project Manager's responsibility to collect a split sample during the frac tank sampling in the event it becomes necessary to verify the facility's results.

Samples of the rinsate which is generated will be collected in a similar manner to that of the tank wastes.

The amount of liquid wastes/dregs and rinsate generated from tank cleaning during Step I is estimated to be roughly 159,000 gallons. Each frac tank will hold about 15,000 gallons. It is estimated that approximately 12 samples will be collected.

It is anticipated most, if not all, of the sludge in the cyanide tanks will be converted into slurry and pumped out to the frac tanks with the liquid waste. Sludge that cannot be converted to slurry will be removed from a tank and

drummed and transported to Nelson for treatment. Samples will be collected of the sludge before the waste is transported off-site. The treatment/disposal facility will analyze the samples for confirmation with prior waste stream analysis.

Subtask 2.2 - Evacuation and Temporary Storage of Tank Liquids

The tank liquids will be evacuated in the following order: 1, 3, 4, 6, 7, 8, 18, 62, sphere, 11, 12, 17, 21 and 29.

Liquids will be removed from the tanks using a vacuum truck. The vacuum truck hose will be inserted into the tanks via manways or other openings from the tops of the tanks. The liquids will be transported via the vacuum truck to the frac tanks. A submersible pump will be available to serve as a back-up in the event the vacuum truck is unable to pull all material from a tank.

Compatible liquids will be mixed, sampled, and analyzed (Section 4.1.2) for bulk shipment to an off-site facility. When one of the two frac tanks is filled to three-quarters of its capacity, which will be considered its full state, sampling will be conducted. The other empty frac tank will continue to receive tank liquid. As soon as the chemical analysis is reported, the frac tank which is filled and sampled, will be transferred into a tanker trailer for transport.

A three-man crew equipped in Level B protection will be required for removal operations at any given tank in accordance with the Health and Safety Plan (Section 6.0).

Following removal of the liquid wastes from a tank, the side hatch or manway to the tank will be removed. In the event the manways cannot be removed, access ways will be cut into the tanks. The structural integrity of the tank will be investigated before cutting. The dreg material within the tanks will then be pumped via trash pumps into vacuum trucks. It is anticipated that the majority of the dreg material will be removed from the tanks in this manner. Material that can not be removed by this technique will be removed during the tank cleaning process (Subtask 2.5).

Subtask 2.3 - Sampling and Analysis of Tank Liquids

The description for sampling and analysis of the cyanide wastes is contained in Section 4.1.2.

Subtask 2.4 - Decontamination of the Tower

Decontamination of the Tower will be conducted in a top to bottom manner. The top of the Tower will be accessed via a manlift. The Tower will be washed, utilizing a fire hose or "hotsy" from the uppermost manway on the Tower. Wash water will be collected from the bottom of the tower and evacuated via a trash pump into a frac tank for holding.

Prior to initiating cleaning of the Tower, all lower manways will be checked to make sure they are secured. In addition, a berm will be constructed around the Tower in case leaks or overflows occur. The area within the berm will be lined with visqueen to reduce downward migration of any spilled liquids. A sump will be constructed in a portion of the bermed area to collect spilled liquids to then be pumped to a vacuum truck.

A three-man crew will be required for cleaning of the Tower. All crew members shall wear safety harnesses and be secured at all times. The crew shall also wear Level B safety protection in accordance with the Health and Safety Plan.

Subtask 2.5 - Tank Cleaning

After evacuating the liquid waste from a tank, it will be cleaned with an appropriate triple rinse using a high pressure water blast, or other appropriate method, to a visually clean state.

The tank will be washed down from a manlift when possible with either a "hotsy", a fire hose, or a high pressure water blaster. Prior to spraying of the tank walls, access way covers will be replaced to prevent loss of liquid. In those cases where access to the tank is cut above ground level, visqueen will be placed over the opening on the inside of the tank to eliminate spray loss. Care will be taken to ensure that the liquids generated from the cleaning operations will not overflow from the tank. A catch basin of visqueen and sand bags will be arranged around each tank to contain spills.

It is assumed that no entry into the tank is required and the washdown water will help turn the sludge into a slurry of a pumpable consistency. In the event that dreg materials remained in the tank from Task 2, the wash waters will be used to slurry those materials. Any slurries generated will be removed via trash pumps into vacuum trucks, and then transferred for shipment to Nelson Industrial. Dreg materials that do not go into slurry will be drummed and shipped to Nelson for treatment. Upon removal of the dreg material, the bottom of the tank will be rinsed to a visually clean state.

Subtask 2.6 Evacuation and Temporary Storage of Tank Slurry and Rinsate

The slurry and rinsate generated during cleaning of the tanks will be held in each respective tank, and then pumped with trash pumps into a frac tank. The pumping will be done through access of the manway inside of vertical tanks or cutouts in horizontal tanks. The bulked rinsate and slurry will be sampled, and the sample forwarded to Nelson Industrial for analysis prior to transport.

It is assumed that all dregs will go to slurry and become pumpable; any dregs that do not slurry must be removed manually and drummed for shipment to Nelson. After removal of the dregs is completed the tanks will be squeegeed and wiped on the bottoms.

Subtask 2.7 - Sampling and Analysis of Tank Rinsate

The description for sampling and analysis of the rinsate generated during the cleaning of the tanks containing cyanide wastes is contained in Section 4.1.2.

Subtask 2.8 - Tank Inspection

Tanks will be rinsed to attain a visually clean state. Tanks will be inspected and recorded by the general contractor to verify visual cleanliness.

4.2 STEP II - TRANSPORT, TREATMENT AND DISPOSAL OF LIQUID ACID AND DREGS

4.2.1 Task 1 - Mobilization

Step II will follow immediately after Step I and no additional mobilization will be required.

4.2.2 Task 2 - On-Site Transfer and Temporary Storage

This task will be performed in the same manner as the work described in 4.1.2. The frac tanks used for bulking the acid will not be the same as those used for the cyanide waste.

Subtask 2.1 - Compatibility Analysis

See Section 4.1.2, Subtask 2.1. Preliminary compatibility evaluation from earlier analytical results, as shown in Appendix C, provide the following:

Acid Liquids/Dregs

Tanks 9 (dreg only), 32, 34, and 36

- Tank 9, due to its high VOC content, may be handled separately.
- Tank 32 has a higher pH and flocculated type of sludge and may be separated from Tanks 34 and 36.

Subtask 2.2 - Evacuation and Temporary Storage Tank Liquids

The tank liquids will be evacuated in the following order: 32, 34, 36. Liquids will be removed and tanks cleaned using the same technique as described in 4.1.2, Subtask 2.2.

Subtask 2.3 - Tank Cleaning

The tanks will be cleaned using the same techniques as described in 4.1.2, Subtask 2.5.

Subtask 2.4 - Tank Inspection

See 4.1.2, Subtask 2.8

4.3 STEP III - TRANSPORT, TREATMENT AND DISPOSAL OF TANK 20 SLUDGE

4.3.1 Task 1 - Mobilization

This work will follow Step II without interruption.

4.3.2 Task 2 - On-Site Transfer and Solidification of Sludge

Sludge contained in Tank 20 will be removed by means of a clamshell bucket and a crane. The material will be transferred from the tank into roll-off boxes and tested for free liquids utilizing the "paint-filter" test. The test used

will be the "paint-filter" test. If the material is found to be a solid it will be transferred to lined dump trailers for transport to Fondessy Enterprises (Fondessy) landfill, Oregon, Ohio. If free liquids are found, an appropriate agent will be added such as fly ash or kiln dust, to solidify the material and make it acceptable for landfill disposal. It will then be loaded into lined dump trailers for transport to Fondessy.

Subtask 2.1 - Waste Stream Analysis

Prior to transport of any material to Fondessy, a sample will be taken and forwarded to the landfill for analysis, and all necessary documentation will be completed.

Subtask 2.2 - Tank 20 Liquids

The presence of an aqueous phase in Tank 20 is dependent upon the amount of recent precipitation. Should there be aqueous material present, it will be removed by vacuum truck and transferred to a tanker trailer for transport to Nelson for treatment. A sample would be taken and forwarded to Nelson prior to transport in order to determine treatability and cost.

Subtask 2.3 - Tank Cleaning

The tank will be cleaned using the same techniques as described in 4.1.2, Subtask 2.5.

Subtask 2.4 - Tank Inspection

See 4.1.2, Subtask 2.8.

4.4 STEP IV - TANK SECURING

Upon completion of cleaning, any tank judged to be unstable will be lowered to the ground and left in a horizontal position.

4.5 TRANSPORT TO OFF-SITE FACILITY

This task details those procedures necessary for hauling of the liquids, dregs and sludge wastes from the site.

4.5.1 Selection of the Waste Hauler

The selected hauler to Nelson is Bentley Oil Inc. of Taylor, Michigan. Solid wastes will be transported to Fondessy Enterprises by Jack Gray Trucking.

4.5.2 Traffic Control

Traffic control at the site will be phase specific. Traffic control for the project is shown on Figure 2. It is anticipated that filling of over-the-road vehicles will be accomplished from hard plumbing running from the frac tanks to the loadout area. Filling operations will be conducted in accordance with The Site Health and Safety Plan.

It is anticipated that a vacuum truck and water truck will be utilized on-site. These vehicles will not leave the site until the project has been completed. Decontamination of the site vehicles will occur at a decontamination pad which will be provided.

4.5.3 Waste Manifesting

Manifesting of the wastes will be the responsibility of the on-site subcontractor. IT will review the manifests for completeness and accuracy, and will obtain a copy of the manifest for site records. IT will sign the manifests upon proper written authorization to do so.

Proper placarding of over-the-road vehicles will be the responsibility of the subcontractors and will be checked by IT personnel. Labeling of special containers will be performed by IT personnel.

4.5.4 Truck Registering

Over-the-road trailers will be dedicated to this job. For purposes of this job, each trailer will be assigned a unique number identifying the vehicle. This number will be used by IT to identify the trailer and its characteristics (i.e., empty weight, gross weight, make, etc.). A site log will be maintained indicating appropriate information such as the I.D. number and trailer usage for site activities.

4.6 TREATMENT AND DISPOSAL AT THE OFF-SITE FACILITY

This task details those activities associated with management of treatment and disposal of the liquid wastes.

4.6.1 Selection of Facilities

IT has solicited bids from qualified area treatment, storage, and disposal (TSD) facilities for treatment and/or disposal of the cyanide and acid wastes.

Nelson Industrial Services Inc. (facility) was selected following a review of the bids submitted. Facility selection was based on, but not limited to:

- o Facility's ability to treat the wastes
- o Operational history of the facility
- o Facility's ability to handle wastes in a timely manner
- o Cost.

4.6.2 Waste Receipts and Invoicing Approval

IT will obtain, on a twice a week basis, copies of the signed Uniform Waste Manifest forms received at the facility for wastes transported from the site. IT will review the copies to determine if the facility's records match the site's records and that all wastes shipped were received by the facility. Discrepancies will be immediately noted in the site log book and resolved with the transporter and the facility.

It is anticipated that invoices for treatment/disposal services will be submitted to IT. IT will review the invoices to determine that the services rendered for the amounts indicated agree with site records and the treatment/disposal agreement.

4.6.3 Facility Audits

IT Quality Assurance personnel will conduct an audit of the facility at the landfill before, during, and after shipment of wastes. The purpose of the audits will be to confirm the landfill's and the facility's ability to handle the wastes, review of waste treatment/disposal procedures, and review record

keeping procedures. A report will be issued following completion of the final audit.

In the event that major QA problems are noted, the IT site manager will be immediately notified, and shipments to the facility will be terminated until such time as the QA problems are resolved and approval for commencement of shipments is received.

4.6.4 Demobilization

This task details those activities associated with demobilization from the site. These activities include:

- o Cleaning and removal of the frac tanks: The frac tanks used for cyanide wastes will be cleaned using a hypochlorite solution prior to removal from the site. Rinsate solutions will be transported to the facility. Frac tanks used for acid wastes will be triple rinsed. Rinsate will be transported to Nelson.
- o Decontamination of site vehicles: The vacuum truck will be internally cleaned using a hypochlorite solution. The rinsate will be transported to the facility. Both the water truck and vacuum truck will be externally cleaned utilizing a steam cleaner. External cleaning will be conducted at the decontamination pad with the wash water collected and transported to the facility.
- o All hoses, plumbing, pumps and other tools and equipment will be deconned using a hypochlorite solution or drummed and transported to Fondessy Landfill.
- o The administrative and shower trailers will be removed from the site.
- o All disposed tyvek suits, gloves, cartridges, etc., will be drummed and transported to Fondessy Landfill.

4.6.5 Report

A report will be prepared to document all activities performed, waste volumes removed, volumes treated/disposed, QA/QC results, and a summary of the project costs. In addition, the report will include copies of manifests and other appropriate documentation.

4.7 PROJECT SCHEDULE

The schedule for the project is presented in Figure 3. The field activities will require approximately 45 working days for completion. A final report will be prepared approximately five weeks after completion of all field work.

5.0 PROJECT MANAGEMENT

IT will provide managerial services for the efficient, safe, and timely accomplishment of this project.

5.1 OBJECTIVES

The objectives of IT's project management services are:

- o Selection of qualified and cost-competitive subcontractors (completed)
- o Provide supervision and coordination of all project activities
- o Ensure that site activities are performed in a manner in accordance with the project health and safety plan
- o Document all project activities.

5.2 PROJECT TEAM

IT will serve as General Contractor for the site, and will accept full responsibility for the total conduct of the job. IT will provide project management, health and safety enforcement, audit of field activities, and audit off-site treatment/disposal facilities.

IT will provide one superintendent to oversee all site activity during the on-site work. IT proposes to also dedicate an Industrial Hygienist to monitor site safety conditions at all times that on-site activities are being conducted. In addition to monitoring site activities, the Industrial Hygienist will conduct air monitoring at the site using cyanide and hydrogen sulfide detectors and other air monitoring devices.

5.3 AUDITS OF FIELD ACTIVITIES AND OFF-SITE TREATMENT/DISPOSAL FACILITIES

IT will provide a constant audit of the activities performed during waste transfer, and tank cleaning. This will be to confirm that all appropriate procedures are followed and documentation of all activities are properly completed with the amounts of waste removed and analytical results being accurately reported. The off-site treatment and disposal facility and the

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landfill will also be audited at least weekly, to confirm that the waste is being properly treated and disposed.

6.0 SITE HEALTH AND SAFETY PLAN

6.1 PROJECT OBJECTIVES

The CCCI facility, encompasses a triangular four-acre parcel of land at 6500 Industrial Highway (Figures 1 and 2). The site is bounded on the west and southeast sides by the Elgin, Joliet and Eastern Railroad right-of-ways and on the northeast side by a vacant industrial lot. The Gary Municipal Airport borders the site along the southeast side. A security fence has been established around the site with 24-hour security provided. Access to the facility can be attained only through the guard stationed at the entry gate.

The objective of this document is to provide a site specific Health and Safety (H&S) Plan for IT and its subcontractors for project activities to be conducted at the site. These activities include:

- o Removal and transport of liquid wastes from the tanks for off-site treatment and disposal
- o Removal and transport of dregs/sludges for off-site treatment and disposal
- o Cleaning of tanks and subsequent transport of rinsate for off-site treatment and disposal
- o Sampling of wastes prior to off-site removal
- o Securing of tanks listed in Tables 1 and 2.

This H&S Plan has been prepared based on presently existing site conditions. If these conditions were to change during project activities, health and safety adjustments will be made accordingly. As noted in Section 6.3, it will be the responsibility of the Site Industrial Hygiene (SIH) representative to make the needed adjustments.

6.2 KNOWN SITE HAZARDS

Site hazards include both physical and chemical hazards. Many of the tanks exhibit extensive rusting; some of the tanks (e.g., Tank 20) have had their tops partially destroyed. The manways of the tanks according to CCCI personnel should not be trusted. In addition, the stairway on the Tower is in poor condition and should be approached with extreme care.

The bulk storage tanks on-site are generally in a deteriorated condition. The tanks should not be manipulated at any time until their liquid contents are removed. Waste handling will be performed from manways or other openings located above the liquid level of the tanks.

Based on the information obtained from previous site investigations, discussions with former CCCI employees and the analyses reported in Table 2, the following chemicals pose potential health risks to site personnel.

6.2.1 Cyanide

A cyanide release at the site would endanger the health and welfare of the workers in the direct vicinity. The release of cyanide vapor is most common in the presence of acids, which liberates a hydrogen cyanide (HCN) vapor. HCN vapor concentrations in air above 100 ppm have been found to be fatal to man after 30 minutes of exposure. A concentration of 270 ppm is immediately fatal (Patty, 1978). The behavior of the cyanide ion prevents the uptake of oxygen by the tissues with resulting asphyxial death. The cyanide ion is absorbed into all tissues; cyanide can be readily absorbed through the skin. The currently accepted threshold limit value (TLV) for HCN and cyanogen in the United States is 10 ppm.

6.2.2 Polychlorinated Biphenyls (PCBs)

Tanks containing PCB materials are not part of the project activities. However, the presence of PCBs on-site and in tanks near those scheduled for clean-up is of concern to the project team.

PCB contaminated materials have been identified in Tanks 19 and 22 (Figure 2). Most of the waste in Tank 19 has been transferred to Tank 22. Tanks 13, 14, 15 and 16 were observed to contain a thick oil mixture. These tanks appear to be part of a previous PCB clean-up operation at the site. During a past inspection, the contents of Tank 19 were observed to have leaked from the tank and spread to the area bounded by the rail spurs to the east and west of the acid soil area indicated on Figure 2.

6.2.3 Sludge Material

Tank 20 contains material referred to as "sludge", ~~which resulted from neutralization of waste pickling liquor.~~ Inspection of the tank has shown it to be in poor condition and portions of the top of the tank have been destroyed allowing rain water and snow to enter the tank. In addition, the tank has a past history of leakage.

The potential dangers presented by Tank 20 involve primarily the quantity of hazardous material in the tank and the deteriorated condition of the tank. The high concentrations of metals in the tank pose a significant threat to personnel through ingestion or direct contact.

6.2.4 Waste Solvent Material

Tanks 23 and 24 contain a material that is a combination of a variety of chlorinated hydrocarbons that were mostly generated as solvents. The tanks contain solvent material that is dominated primarily by a methylene chloride-hydrocarbon mixture. Analyses have shown the organic chloride content ranges from 8.5% to 14.5%. Based on a conversation with a former CCCI employee (Mr. Chet Nellett), Tank 31 also contains a solvent mixture whose content is unknown, at present. These tanks will not be part of the project, but personnel should be aware of their presence and take the appropriate action to minimize any releases from the tanks.

6.2.5 Waste Acid and Chlorine

Highly acidic wastes are present in Tanks 34 and 36 as liquids and in Tank 9 as a dreg/sludge. The contents of Tank 32 are less acidic. Tank 34 is potentially highly dangerous due to its large volume, a pH of less than one, and deteriorated condition of the tank. It is not known if cylinders of chlorine gas still exist on-site. For protection from the accidental release of chlorine gas and the risk from cyanide gas described in 6.2.1, emergency escape respiratory protection shall be provided to all site employees.

6.2.6 Silicon Tetrachloride

Tanks 40, 41 and 42, located west of the office shop-work area complex, are believed to contain silicon tetrachloride. This compound is a highly irritating, colorless, corrosive fuming liquid that has an odor described as

"suffocating". It is highly toxic by both inhalation and ingestion. As with the solvent and PCB-containing tanks, these three tanks are not part of the project activities. Project team members should be aware of the location of these tanks and avoid any contact with them. DO NOT BRING INTO CONTACT WITH WATER.

6.3 PROGRAM STRUCTURE

This Health and Safety Plan prescribes workplace procedures which will be followed in order to protect employees who will be performing the following tasks:

- o Removal and transport of wastes (liquids and dreg) from the tanks for off-site treatment and disposal
- o Tank cleaning with subsequent removal and transport of rinsate for off-site treatment and disposal
- o Collection of samples from frac tanks.

The requirements listed may change as work progresses due to changing conditions, but no changes will be made without prior approval by the SIH, also referred to as the Site Safety Officer (SSO). The program outlined in this Health and Safety Plan is for IT, subcontractor personnel, and all site visitors.

The SIH representative will be responsible for the coordination of this plan. He/she, or one or more of their representatives, will be on-site for the project start-up and through the course of the project to supervise the worker protection program. Liaison with the U.S. EPA and its representatives and/or subcontractors on matters relating to safety and health will be handled by the SIH representative.

The IT Project Manager is responsible for field implementation of the Health and Safety Plan, but only the SIH representative can change its provisions. The Project Manager's responsibilities include communicating the specific requirements to all personnel, conducting audits, and consulting with the SIH regarding appropriate changes in safety and health requirements. Specific site functions that the SIH will be responsible for implementing include:

- o Supervise the day-to-day implementation of the site-specific health and safety program
- o Train new site personnel on the specific site health and safety items, interact with project personnel on health and safety matters, investigate and report accidents/ incidents
- o Maintain liaison between field activities and regulatory personnel
- o Perform air quality and personal monitoring as required
- o Enforce the requirements of this manual and the site-specific program.

All on-site personnel are responsible for understanding and complying with the requirements of this plan. Failure to comply with this plan will result in disciplinary action, which could lead to removal from the site or termination.

6.4 PERMISSIBLE EXPOSURE LIMIT GUIDELINES

Eight-hour time-weighted average for threshold limit values (TLV), concentrations immediately dangerous to life or health (IDLH) and other physical characteristics of chemicals most likely encountered during work covered by the scope of this plan, are as follows:

	<u>TLV</u>	<u>IDLH</u>	<u>COMMENTS</u>
Hydrogen Cyanide	10 ppm	50 ppm	Bitter almond odor, weakness, headache, nausea, vomiting at lower concentrations. See Section 6.2.1.
Methylene Chloride	100 ppm	5000 ppm	Avoid eye-skin contact. Odor Threshold: 300-600 ppm
Hydrochloric Acid	5 ppm	100 ppm	Colorless gas with irritating odor. Avoid eye, mucous membrane contact.

Material Safety Data sheets for these compounds are attached in Appendix A.

6.5 TRAINING PROGRAM

All personnel, prior to being allowed site access, will attend a training session conducted by the SIH that communicates the potential H&S hazards on the site and instructs the individuals on the requirements of the H&S plan. This training will be designed to address the requirements of OSHA Hazard Communication Standard (29 CFR 1910.1200), OSHA Hazardous Waste Operations and Emergency Response, Interim Final Rule (29 CFR 1910.120), and health and safety training required under RCRA.

6.5.1 Preproject Training

All employees and contractors who work on site shall have successfully completed a formal training program which shall include, as a minimum, the following items before they are permitted to enter the Exclusion or Decontamination zones:

- o Basic Safety Training - This course shall stress fundamentals such as the cause and prevention of slip, trip, and fall hazards; safe lifting techniques; heat stress illnesses and their prevention.
- o Hazard Protection - This course shall deal with the identification, recognition, and safe work procedures of toxic materials. The use and limitations of applicable protective clothing, and decontamination procedures are an important part of this course.
- o First Aid and Cardiopulmonary Resuscitation (CPR) - A portion of employees will have completed the standard Red Cross First Aid and CPR courses.
- o Health Hazard Awareness - Information shall be given concerning hazardous materials on site to which employees may be exposed. Information will include routes of exposure, toxic effects, appropriate protective equipment, medical surveillance, and the specific nature of the job which could result in exposure to hydrogen cyanide, hydrochloric acid, and methylene chloride.
- o Work practices and engineering controls to minimize risk.
- o Emergency Response Training - Procedures outlined in site emergency procedures are to be reviewed with all personnel on site.

- o Hearing Conservation Program.
- o Respirator training - The use, limitations, and inspection of air purifying respirators, and SCBAs will be discussed. Proper decontamination procedures will also be covered. Respirator fit test will be given to all personnel consisting of qualitative fit test using irritant smoke in a plastic containment. Personnel shall breath normally and heavily, move their heads up and down and side to side, and talk while wearing the respirator in the smoke. Upon completion of this training, the employee will be asked to complete the form illustrated in Figure 4.

All employees and contractors, who are expected to enter the Exclusion and/or Decontamination Zones (Section 6.8.1 and 6.8.2, respectively) shall have received a minimum of 40 hours of initial off-site instruction. On-site supervisors shall complete at least eight additional hours of specialized training.

6.5.2 Daily Safety Meetings

A daily safety meeting will be conducted at the beginning of each shift or whenever new employees or contractors arrive at the job site once the job begins. These meetings discuss the H&S considerations for the day's activities and outline the necessary protective equipment. This meeting will be conducted by the SIH who will complete the Tailgate Safety Meeting form shown in Figure 5.

6.5.3 Training Records

All training that is conducted on site will be documented using the appropriate forms (Figure 6) and for IT personnel will be retained in the employee's job file. Forms covering sub-contractor employment will be forwarded to those organizations, with a copy retained in the project file.

6.6 MEDICAL SURVEILLANCE

6.6.1 Pre- and Postproject Physical Examinations

All personnel that work in the Exclusion or Decontamination Zones will receive a pre- and postproject physical examination. The preproject physical will take place within 15 days prior to working on site and the postproject

physical will take place within 30 days after leaving the site. The examination will include:

- o Medical and occupational history and physical examinations (including a history of respiratory disease)
- o Complete blood count and differential
- o Urinalysis (dip stick and microscopic)
- o SMA-20 or equivalent
- o Audiometric examination
- o Chest X-ray (14 x 17 posterior/anterior view)
- o Pulmonary function test (FVC and FEV 1.0)
- o EKG for employees over 45 years of age or when there is an indication of problem
- o Vision acuity and color
- o Drug and alcohol screen.

The chest X-ray may be omitted for IT personnel who have had one within the past year.

6.6.2 Injury and Illness Treatment

Any employee who is suspected of having an over exposure to the chemicals on site will be given a complete physical examination. The Whiting Clinic, Inc. (with offices in Hammond and Whiting, Indiana), IT's contracted local clinic, is to provide this service as well as to treat injuries that occur on the job that are not handled at the site as first aid or treated as an emergency hospital visit. Any employee or contractor who develops a lost-time illness or sustains a lost-time injury will be reexamined by an IT physician. The physician will certify that the employee is fit to return to work before his employment on site can continue. Any physical activity that should be restricted based on the physician's evaluation is to be noted on the proper form (Figure 7).

In the event of any injury or accident, a "Supervisor's Employee Injury Report" (Figure 8) shall be completed as soon as practical by a supervisor after the event. This shall be reviewed by the Project Manager and the SS0.

6.6.3 Medical Records

All medical surveillance records shall be maintained for a period of 30 years and shall be available as required by state and/or local regulations; namely 29 CFR 1910.20 (a)-(e) and (g)-(i).

6.7 PERSONNEL PROTECTION EQUIPMENT

Employees providing support services not in the Exclusion Zones (i.e., decontamination, sample collection support) shall be equipped with Level C protection, which includes the following:

- o Full-face, air-purifying respirator with GMC-type cartridges and prefilter (MSHA/NIOSH approved) for organic vapors, chlorine, formaldehyde, hydrogen chloride, and sulfur dioxide
- o Polycoated tyvek coveralls (hooded) - Sleeves taped to gloves, legs taped to boots
- o PVC outer gloves
- o Surgical-type inner gloves
- o Hard hat
- o Rubber boots with steel toe and shank
- o Outer boot covers (chemical protective throw-aways)
- o Escape mask (ELSA).

Employees who are involved in the actual removal, transfer of materials, tank cleaning, and sample collection support shall be equipped with Level B protection as prescribed below:

- o Positive pressure SCBA
- o Sigal guardian suits (with tape up)
- o PVC or neoprene outer gloves
- o Surgical-type inner gloves

6.8.2 Decontamination Zone

This zone includes the areas immediately surrounding the Exclusion Zone. This shall occur at the interface of the Exclusion Zone and the Support Zone and shall provide for the decontamination of equipment and personnel before crossing into the Support Zone.

6.8.3 Support Zone

This zone covers all areas outside of the Decontamination Zone. This area is considered to have no significant air, water, or soil contamination. The Support Zone provides a changing area for personnel entering the Decontamination and Exclusion Zones.

6.9 DECONTAMINATION PROCEDURES

6.9.1 Personnel Decontamination

Upon leaving the Exclusion Zone, personnel shall:

- o Wash and rinse outersuit, respirator, gloves, and boots
- o Untape mask, ankles, and wrist
- o Remove outersuit, gloves, boot covers, and hard hat
- o Wash and rinse inner gloves and boots
- o Remove respirator, inner gloves, and inner boots
- o Remove inner clothing in decontamination trailer, shower, and redress.

The SCBA will be disconnected from the regulator at the upwind (identified by a flag) edge of the Exclusion Zone. Personnel will then connect to a MSA an acid gas/ organic vapor/HEPA filter canister that is MSHA/NIOSH approved in order to move through the Level C zone and initial decontamination procedures. The Sigel suits will be scrubbed down with detergent and rinsed for reuse before each break and at the end of each shift. New outer gloves and boot covers will be worn after each break.

The break area will be in the Decontamination Zone next to the shower trailer. All outer protective equipment shall be decontaminated before removal for a break. Drinking will be permitted in this area only after hands and face have

been washed. Eating and smoking is only permitted in the Support Zone. Showers are required by all personnel working in Level B and C prior to entering the Support Zone.

6.9.2 Equipment Decontamination

All equipment used in the project operations on site shall be cleaned in the decontamination area before removal to the Support Zone. Protective equipment such as respirator facepieces will be decontaminated at the end of the shift. The heavy equipment will be steam cleaned on the truck decontamination pad before removal to the Support Zone. Monitoring equipment, e.g., Hnu meter (photo-ionization meter), HCN monitor, etc., will be protected from contamination to the extent practical by plastic bags. Exposed parts will be cleaned with wet cloths and alcohol wipes.

6.9.3 Waste Disposal

Decontamination water and protective clothing will be stored in drums on site and disposed of during the project.

6.10 WORK ACTIVITIES

Personnel involved in tank cleaning, material transfer or treatment, or sample collection will use Level B personnel protection specified in Section 6.7.

Tanks which will undergo removal and cleaning operations will initially be accessed from a roof or manway above the liquid level of the tank. Personnel shall gain access to this point with a (hydraulic type) aerial lift bucket. Use of an extension ladder may be approved on a case-by-case basis by the SIH.

All employees working at elevated locations (above four feet from the ground) shall be equipped with lifeline and Class II harness (chest type). These employees may also be equipped with two-way radios and use hand signals to communicate with the SIH and other site personnel. Tank clean-up will consist of the procedures outlined in Section 4.0 and summarized below:

- o Evacuation of liquids
- o Washdown and slurry
- o Sludge/dreg removal
- o Decontamination of the Tower.

It is expected that project personnel will not enter a tank during any clean-up activity; thus a level A (confined space) situation is not anticipated. If sludge/dreg remains after an initial rinsing then access to this material must be gained for its removal. It is assumed personnel can obtain access for proper removal by cutting entry portals in the tanks eliminating confined space entry.

6.11 AIR MONITORING

Air monitoring will be performed during all phases of the project. As HCN gas is of primary concern to personnel, at least two MDA Computer Model 4100 HCN monitors will be kept and utilized on-site. These monitoring devices may be attached directly to site personnel to monitor worker exposure during the various work functions or used for area monitoring purposes. The HCN monitors are set to alarm at a HCN concentration of 10 ppm. In addition, they have the following cross sensitivities and will alarm at the 10 ppm set point:

<u>CONCENTRATION IN AIR</u>		<u>METER READOUT</u>
H ₂ S	2 ppm	10 ppm
Chlorine	10 ppm	5 ppm
HCl	10 ppm	7 ppm
Phosgene	10 ppm	5 ppm

If alarms are sounded, Draeger tubes for HCN and H₂S will be used for additional air monitoring. Based on results of this air testing, the SIH may decide to upgrade the level of protection.

Area air monitoring will also be conducted with direct reading instruments for explosive limits, oxygen, and volatile organic compounds (VOCs). Monitoring for explosive limits and oxygen deficiency is to be conducted using MSA 260, GasTech 1314 or equivalent combustible gas/oxygen meters. Monitoring for VOCs is to be conducted using HNu P1101 or Organic Vapor Analyzer (OVA). Additional Draeger Tubes (i.e., methylene chloride) will be kept on-site and used as needed.

Where tank cutting is involved, air monitoring will be conducted to comply with IT's Hot Work Permit.

7.0 EMERGENCY CONTINGENCY AND RESPONSE PLAN (ECRP)

7.1 SCOPE OF WORK

The Health and Safety Plan for the CCCI site has been established to allow site operations to be conducted in order to minimize hazardous health impacts on employee and community health and safety. In addition, this Emergency Contingency and Response Plan (ECRP) has been developed to cover extraordinary conditions that might occur at the site.

All accidents and unusual events will be dealt with in a manner to minimize health risk to site workers and the surrounding community. In the event of an accident or other unusual event, the following procedures will be followed:

- o First aid and other appropriate initial action will be administered by properly trained personnel closest to the incident. This assistance will be conducted in a manner to assure that those rendering assistance are not placed in a situation of unacceptable risk.
- o All incidents will be reported to and documented by the designated Emergency Coordinator, who is responsible for coordinating the emergency response in an efficient, rapid, and safe manner. The Emergency Coordinator will decide if off-site assistance, medical treatment, or both is required and arrange for such assistance. The Emergency Coordinator will ensure that adequate emergency equipment will be available on site.
- o All workers on site are responsible to conduct themselves in a mature, calm manner in the event of an accident or unusual event. All personnel must conduct themselves in a manner to avoid spreading danger to themselves, surrounding workers, or the community in general.

The site Project Manager will administer site security during activation of the ECRP.

7.2 RESPONSIBILITIES

7.2.1 Emergency Coordinator

The site Project Manager is responsible for field implementation of the ECRP. This person has training and experience in emergency response. As the Emergency Coordinator, specific duties include:

- o Communicating site ECRP requirements to all personnel, whether directly involved in emergency response or not
- o Specifying a backup alternate (most likely the SIH)
- o Purchasing supplies as necessary
- o Controlling activities of subcontractors and respond to outside agencies
- o Anticipating, identifying, assessing, and controlling fires, explosions, chemical releases, and other emergency situations.

7.2.2 Safety Coordinator (SIH)

The SIH is responsible for:

- o Establishing health and safety procedures
- o Conducting preproject training
- o Directing the safety technician
- o Monitoring during project start-up.

He will make advance arrangements with appropriate support groups and alert them to the site hazards and types of emergencies that may arise. As the Safety Coordinator, specific duties include:

- o Providing a map of the site location and define the ingress routes
- o Determining response time and adequacy of emergency support services
- o Identifying backup medical and emergency facilities
- o Providing training and information about hazards on site and special handling procedures
- o Establishing personal contact with each designated agency. This includes on-site training for appropriate response agencies. Table 5 contains a list of off-site support agencies and groups.

7.2.3 IT and Subcontractor Employees

All on-site personnel, whether involved in emergency response or not, will be notified of their responsibilities in an emergency. They will be familiar with the ECRP and the Emergency Coordinator's authority.

IT's ECRP teams will be trained in decontamination, response, rescue, and hazard containment. These teams will be American Red Cross-certified (or equivalent) in cardiopulmonary resuscitation (CPR) and emergency first aid.

7.3 EMERGENCY EQUIPMENT

In the event of an emergency, equipment will be available to rescue and treat victims, protect response personnel, and mitigate hazardous conditions on site. This equipment will be stored at a secure location (e.g., the Administration trailer) and away from sources of contamination until it is needed.

7.3.1 Personal Protection

Personal protective equipment will include:

- o Neoprene boots
- o Sigal Guardian suits
- o Tyvek suits - polyethylene coated and uncoated
- o Neoprene and nitrile gloves
- o Face shields and goggles
- o Self-contained breathing apparatus (SCBA)
- o Full-face chemical cartridge respirators with cartridges for organic vapors and dust.

7.3.2 Medical

Emergency first aid equipment will include:

- o Splints
- o Antiseptics
- o Blankets
- o Decontamination solutions appropriate for on-site chemical hazards
- o Emergency eye wash
- o Emergency showers or wash stations
- o Cold packs

- o Reference books containing basic first aid procedures and information on treatment of specific chemical injuries
- o Stretchers
- o Water, in portable containers
- o Emetic agent to induce vomiting
- o Antibacterial ointments
- o Bandage materials.

7.3.3 Hazard Mitigation

Hazard mitigation equipment will be stored in a spill control equipment locker, and is to be used in the physical containment of any released hazardous constituents. This equipment will include:

- o Containers to hold contaminated materials, i.e., 55-gallon drums
- o Visqueen
- o Sorbent material and booms for both liquids and oils
- o "Dike and Plug" or similar material for patching tanks
- o "Water Bug" or similar type pump for collection of liquids
- o Shovels - wooden handle, steel type.

7.4 COMMUNICATION AND NOTIFICATION

7.4.1 Communications

The primary internal communication system will rely on radio communications between site trailer and site personnel. Hand signals will be used as a backup should radio communications fail.

External communications will employ stationary phones housed in the site trailer. Personnel will be familiar with protocol for contacting support groups and agencies identified in the ECRP. Emergency numbers will be placed in company vehicles and at strategic locations throughout the site.

7.4.2 Site Maps

7.4.2.1 Assembly Area

A site evacuation area will be designated before job start-up and will be located upwind of the prevailing wind. Here, emergency needs will be provided such as:

- o Assembly for evacuated site personnel
- o First aid for injured personnel
- o Decontamination material
- o Communications.

7.4.2.2 Emergency Services Route Maps

An emergency services route map will be prepared and located in company vehicles, posted with the emergency number list (Table 5) on site, and distributed to support groups and agencies for:

- o St. Catherine Hospital
- o Local IT-selected clinic (The Whiting Clinic)
- o City police department
- o Fire department.

All maps will be used in training sessions and in emergency response planning. Practice "runs" will be made along all emergency service routes by supervisory personnel.

7.4.3 Notification

If the Emergency Coordinator determines that the site has an uncontrolled situation such as a spill, fire, or explosion which could threaten public health or the environment, he will report his findings as follows:

- o Alert site personnel via radio.
- o If his assessment indicates that evacuation of the work area may be advisable, he will immediately initiate the evacuation notice, stop the operation, and notify one person from each organization of the appropriate authorities listed in Table 5. He will be available to help appropriate officials decide whether adjacent areas should be evacuated.

- o In the event normal communication lines fail, a backup communication system will be activated. This system (e.g., a Citizen's Band radio or mobile telephone) will be able to access the appropriate emergency service providers.

The notification report will be made from the site trailer to the appropriate support groups and will include:

- o Description of incident (e.g., release, fire)
- o Name and telephone number of reporter
- o Name and address of incident
- o Name and quantity of materials or material involved to the extent known
- o The extent of injuries, if any
- o The possible hazards to human health or the environment, and cleanup procedures
- o Assistance that is requested.

7.5 EMERGENCY PROCEDURES

Potential incidents fall under four general classifications: (1) fire or explosions; (2) chemical releases to the atmosphere, soil, or surface waters; (3) severe weather conditions such as tornado and lightning storms; and (4) worker injury or illnesses. The following sequence of events constitute the specific responses and control procedures to be taken in the event of these four incident scenarios.

The initial response to any emergency will be to protect human health and safety, and then the environment. Secondary response to the emergency will be identification, containment, treatment, and disposal assessment.

7.5.1 Hazard Assessment

The Emergency Coordinator in consultation with the SIH will assess possible hazards to human health or the environment that may result from the chemical

release, fire, explosion, or severe weather conditions. The Emergency Coordinator will assess the hazards posed by an incident through the following steps, as appropriate:

- o Assess immediate need to protect human health and safety
- o Identify the materials involved in the incident
- o Identify exposure and/or release pathways and the quantities of materials involved
- o Determine the potential effects of exposure/release, and appropriate safety precautions.

This assessment will consider both the direct and indirect effects of the chemical release, fire, explosion, or severe weather conditions (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water runoff from water or chemical agents used to control fire and heat-induced explosions).

Based on this assessment, the Emergency Coordinator will determine what risks are posed to employees and community populations. If the incident cannot be controlled by operating personnel without incurring undue risk, the Emergency Coordinator will order the evacuation of all workers at risk and notify appropriate parties listed in Table 5 of the situation and the assistance required. If the Emergency Coordinator determines that any persons outside the site are at risk as a result of the incident, he will contact the appropriate agencies and departments listed in Table 5 and advise them of the risk and the need or potential need to institute off-site evacuation procedures.

7.5.2 Fire and Explosion

When fire or explosion appear imminent or have occurred, all project activities will cease.

The Emergency Coordinator will assess the severity of the situation and decide whether the emergency event is or is not readily controllable with existing fire suppression equipment on hand. Firefighting will not be done if the risk to operating personnel appears high. The Station No. 1 Fire Department will be called in all situations in which fires or explosions have occurred.

If the situation appears uncontrollable, and poses a direct threat to human life or the environment, a warning will be administered to all personnel to secure their emergency equipment. If the chances of an impending explosion are high, the entire site will be evacuated.

The Emergency Coordinator will alert all personnel when all danger has passed, as determined by the fire department.

Situations which will activate notification of other emergency contacts are:

- o A fire causes or could cause the release of toxic fumes
- o The fire spreads and could possibly ignite nearby fuel oil or other liquid wastes, or could cause heat-induced explosions
- o The fire could possibly spread to off-site areas
- o Use of fire extinguishers and suppressants does not result in fire contaminant
- o An imminent danger exists that an explosion could occur, causing a safety or health hazard
- o An imminent danger exists that an explosion could ignite other hazardous waste at the facility
- o An imminent danger exists that an explosion could result in release of toxic materials
- o An explosion has occurred.

7.5.3 Chemical Release

If a chemical release resulting in probable vapor cloud is noted, the information will be immediately relayed to the Emergency Coordinator. The Emergency Coordinator in consultation with the SIH will assess the magnitude and potential seriousness of the release by reviewing the following information:

- o Material safety data sheets (MSDS) for the material released
- o Source of the release
- o An estimate of the quantity released and the rate at which it is being released
- o The direction in which the air release is moving
- o Personnel who may be or may have been in contact with material, or air release, and possible injury or sickness as a result
- o Potential for fire or explosion resulting from the situation
- o Estimates of area under influence of release.

If the release is determined to lie within the on-site emergency response capabilities, the Emergency Coordinator will implement the appropriate action.

If the incident results in chemical concentrations at the site perimeter exceeding the action levels specified in the Health and Safety Plan, the Emergency Coordinator will notify the appropriate support agencies. The Emergency Coordinator may elect to make immediate notification if conditions warrant. In the event of an emergency release, all personnel not involved with emergency response activity will be evacuated from the immediate area.

MSDS forms will be consulted in the event of a chemical release to air, land, or water.

7.5.4 Natural Disaster

When a tornado warning has been issued or when a lightning storm occurs (within a five-mile radius of the site), the information will be immediately relayed to the Emergency Coordinator in the Support Area and all personnel shall stand by for emergency procedures. In the case of a tornado siting, personnel shall institute shutdown procedures and lie down in a depression. When a storm passes, the Emergency Coordinator will inspect all of the on-site equipment to ensure its readiness for operation. If any equipment has been damaged, the work will not be restarted until the equipment has been repaired or replaced.

If the Emergency Coordinator's inspection indicates a fire, explosion, or release has occurred as the result of a severe weather condition, he will follow the appropriate procedures in Sections 7.5.2 or 7.5.3.

7.5.5 Security

During activation of the ECRP, the Emergency Coordinator or his designated representative, will control access to the site and maintain a security incident log which will include:

- o Time of entry
- o Expected exit time
- o Use of team or "buddy" system
- o Task being performed
- o Location of task
- o Rescue and response equipment used
- o Protective equipment being used.

7.5.6 Medical Treatment/Accident

Selected on-site emergency personnel will be trained:

- o In on-the-spot first aid and CPR treatment techniques
- o To establish contact with medical experts
- o To establish liaisons with local emergency response support agencies.

Program elements will include as a minimum:

- o Establishing liaison with local medical personnel, for example: contracted physician, medical specialists, local hospitals, ambulance service, and poison control center. Inform and educate these personnel about site-specific hazards so that they can be optimally helpful if an emergency occurs. Develop procedures for contacting them; familiarize all on-site emergency personnel with these procedures.
- o Setting up on-site emergency first aid stations; see that they are well supplied and restocked immediately after each emergency.

7.5.7 Follow-up and Reentry

Before normal operations are resumed, the Emergency Coordinator will see that another emergency can be handled by:

- o Assuring all appropriate notifications were made
- o Restocking all equipment and supplies
- o Clean, refuel, and repair all additional equipment
- o Review and revise all aspects of the ECRP.

In addition, the Emergency Coordinator will verify that ambient concentrations of toxic chemicals are below limits generally recognized as safe.

7.6 TRAINING

In addition to the preproject training outlined in the Health and Safety Plan, specific emergency response training will:

- o Relate directly to site-specific, anticipated situations
- o Be repeated often in "tailgate" sessions
- o Provide for an evacuation drill
- o Ensure that training records are maintained.

Visitors will be briefed on basic emergency procedures such as decontamination, emergency signals, and evacuation routes.

Personnel without defined emergency response roles (e.g., contractors, federal agency representatives) must still receive a level of training that includes at a minimum:

- o Hazard recognition
- o Standard operating procedures
- o Signaling an emergency: the radio signals used, how to summon help, what information to give and who to give it to

- o Evacuation routes and assembly area
- o The person or station to report to when the ECRP is activated.

IT personnel will have a thorough understanding of the ECRP. Training will be directly related to their specific roles and will include:

- o Emergency chain-of-command
- o Communication methods and signals
- o How to call for help
- o Emergency equipment and its use
- o Emergency evacuation while wearing protective equipment.

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EPA Region 5 Records Ctr.



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SITE ASSESSMENT/REMOVAL ACTION PLAN
FOR
CONSERVATION CHEMICAL
U.S. EPA ID: IND040888992
SSID#: Y1
TDD: T05-9311-014
PAN: EIN0047SAA

VOLUME 1 OF 2



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FOR
CONSERVATION CHEMICAL
U.S. EPA ID: IND040888992
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VOLUME 1 OF 2

February 2, 1994

Prepared by: John Steward
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Date: 2-2-94
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Date: 2-2-94



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1.0 INTRODUCTION

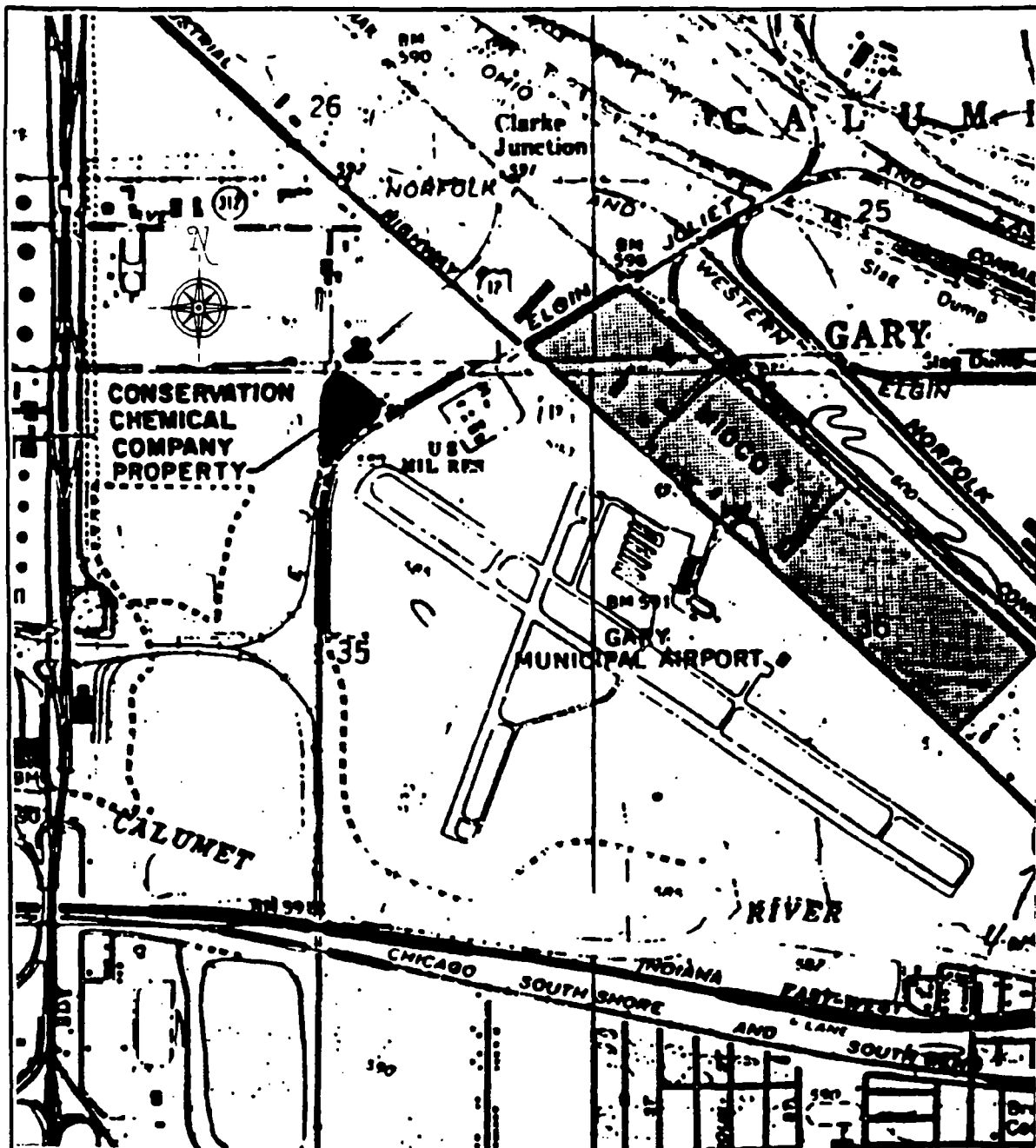
The Ecology and Environment, Inc. (E & E), Technical Assistance Team (TAT) was tasked by the Emergency and Enforcement Response Branch (EERB) of the United States Environmental Protection Agency (U.S. EPA) to conduct a site assessment at the Conservation Chemical site in Gary, Lake County, Indiana, under Technical Directive Document (TDD) number T05-9311-014. The TAT was tasked to develop a health and safety plan; compile a plan to sample the tanks, drums, lagoons, and soils on-site; arrange for an engineering firm to perform an aerial and land survey of the site; and to arrange for a mobile laboratory to provide screening of the soils for polychlorinated biphenyls (PCBs) at the site.

The site assessment was performed in accordance with the National Contingency Plan (NCP), and Paragraph (b) (2) of 40 Code of Federal Regulations (CFR) section 300.415 to evaluate on-site conditions and possible threats to human health, welfare, and the environment. This report summarizes these activities.

2.0 SITE BACKGROUND

The Conservation Chemical (CC) site is located at latitude 41°37'28" and longitude 87°25'10" in the NE¼ of Section 35, Township 37, Range 9 and the SE¼ of Section 26, Township 37, Range 9, at 6500 Industrial Highway (U.S. Route 12) in Gary, Lake County, Indiana (See Figure 1, Site Location Map). The triangle-shaped, 4.1-acre site is located in a predominately industrial area. The site is bordered on the northeast by the Western Scrap Superfund site, on the southeast by the Gary Airport, and on the south and west by a spur of the Elgin, Joliet and Eastern railroad. Topography is relatively flat ranging from an elevation of 595 feet in the southern "pie-shaped" basin to 590 feet along the northeast boundary. The surrounding surface water drainage is southward toward the marshlands located directly south of the site. The original soils at the site were fine grained sands interbedded with discontinuous clay lenses. However, a significant amount of fill material has been added. The shallow unconfined Calumet aquifer is generally located within 10 feet of the surface. The flow of groundwater is to the south-southwest toward the Grand Calumet River.

Prior to 1967, the CC site was owned by Berry Oil Company which operated an oil refinery at the site. Many of the storage tanks and drums used by CC were left by Berry Oil and have been utilized by CC. Other remnants of the oil refinery operation still on-site include the office/shop building, two acid lagoon-pit areas, two-concrete lined pits, a distillation column, and a forced-draft cooling tower. Also remaining is a "pie-shaped" basin at the southern apex of the site that may have been part of a wastewater treatment and disposal system for the refineries.



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Technical Assistance Team

Region V

TITLE	Site Location Map	FIGURE #	1
SITE	Conservation Chemical	TCOP	T05-9311-014
CITY	Gary	STATE	Indiana
SOURCE	USGS Quadrangle Map	SCALE	None
		DATE	12-22-83
		REVISED	

In 1967, Norman Hjersted purchased the facility to convert industrial wastes into forms which would be acceptable for disposal or reuse. From 1967 to 1975 and from 1980 to 1985, the CC facility stored and treated spent acids, oils, and solvents and also operated as a producer of ferric chloride, which was marketed to wastewater treatment plants as a chemical precipitant for phosphorous removal in activated sludge. The process involved the reaction of ferrous chloride pickling liquor with chlorine and scrap iron to produce ferric chloride. Scrap was added to increase the concentration of ferric chloride to remove the free acidity by conversion to the iron salts. Due to the irregularity and variety of incoming materials, a wide range of processes and treatment techniques were required to effectively handle these materials.

The waste pickling liquor used at the site was generated by the steel mill industry. Pickling lines are used in steel mills to remove scales that form on the metal during the rolling process. Continuous picklers utilize either hydrochloric or sulfuric acid. A ferrous chloride waste product results when hydrochloric acid is used; the scales are dissolved in the acid in the form of ferrous chloride. When the ferrous chloride reaches a concentration of 18 to 20%, the pickling acid is no longer usable. The spent pickling liquor contains free hydrochloric acid, ferrous chloride, and water, as well as small amounts of other impurities.

From 1975 to 1980, the CC facility operated as a hazardous waste terminal and treatment facility for cyanide, organic solvents, plating waste, and waste oils. At that time, the facility's primary method of treatment involved waste neutralization. However, the CC facility was forced into cessation of its hazardous waste processing activities as a direct result of its inability to comply with federal government hazardous waste regulations. Following its abandonment of hazardous waste activities, the company redesigned the plant for reinstatement of its ferric chloride production.

In October 1983, the E & E Field Investigation Team (FIT) installed six monitoring wells on the CC facility under TDD number R05-8307-001.

On October 26, 1983, the Gary Municipal Airport completed its Hazardous Waste Assessment Report at the CC site (See Appendix D - Previous Site Investigation Report). Four monitoring wells were installed and sampled.

In May 1984, after a FIT site investigation (TDD# T05-8404-005), the FIT documented volatile organic compounds (VOCs) and metal contamination in the shallow Calumet aquifer (See Appendix E - Preliminary Sampling Investigation).

On February 8, 1985, the Weston-Sper Technical Assistance Team (TAT) conducted a site assessment (TDD# T05-8502-006) and identified several imminent threats to human health and the environment, including significant amounts of a cyanide sludge material in close proximity to tanks containing acid, creating the potential for a hydrogen cyanide release; and a leaking tank containing a total of 163,000 gallons of PCB-contaminated oil. An acid waste lagoon used for process waste disposal and a "pie-shaped" basin containing hazardous waste was observed by the TAT.

In May 1985, an Emergency Action Plan was submitted by the Weston-Sper TAT to U.S. EPA under TDD number T05-8502-006. The plan included recommended removal actions and costing, which addressed the removal of cyanides, PCBs, solvents, and neutral waste acids (See Appendix F - Emergency Action Plan).

On September 27, 1985, U.S. EPA issued a U.S. EPA Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 106 Administrative Order, which required the potentially responsible party (PRP) to remove and dispose of hazardous waste at the CC site.

On October 4, 1985, a U.S. EPA CERCLA removal action was initiated at the site under Delivery Order number 6894-05-053. The ERCS contractor was PEI, which subcontracted the work to Mid America Environmental Services. The U.S. Environmental Response Team (ERT) collected soil samples in the "pie shaped" basin. (See Appendix G - ERT "Pie-Shaped" Basin Soil Sampling). Results showed elevated levels of heavy metals in the basin.

In December 1985, CC shut down operations due to failure to comply with federal regulations requiring the closure of surface impoundments.

From June 1987 to February 1988, the Respondents of the original September 1985 106 Administrative Order as supplemented, conducted removal activities at the CC facility. These activities included the construction of a fence, removal of acid and cyanide liquids and dregs for off-site treatment and disposal, removal of Tank #20 sludges for off-site disposal, and securing of empty tanks. Approximately 139,949 gallons of cyanide liquids; 285 drums of cyanide solids; 5,718 gallons of acid liquids; 45 drums of acid solids; 1,507 tons of Tank #20 solids; and 48,700 gallons of Tank #20 filtrate were removed and disposed of off-site. Each of these tanks was stabilized and secured.

In December 1989, Respondents dismantled a cracking tower contaminated with cyanide. The contents were drummed and left on-site.

In January 1990, ERCS solidified the PCB-contaminated material in Tank #22 using 3,037 tons of lime, and staged the material in a pile in an area west of Tank #22.

In March 1990, the Environmental Response Service (ERS) was contracted by the PRPs to drill four monitoring wells around the site. The wells were numbered ERS1 through ERS4 (See Appendix H - ERS Groundwater Investigation Report). O & M Abatement, Hazelcrest, Illinois, arrived on-site to remove the asbestos-containing material stored on-site. PRP contractor oversight by the TAT was conducted under TDD number T05-9003-020 (See Appendix I - Groundwater Monitoring Well Sampling).

On September 6, 1990, U.S. EPA demobilized from the CC facility. Over the course of the removal activities, the following wastes were shipped off-site for disposal: 187,948 gallons of PCB-contaminated oil; 214.78 tons of PCB-contaminated soil; 1,941 gallons of hazardous waste liquid; 60 tons of hazardous waste solids; 15,300 gallons of flammable waste liquid; 112 gallons of flammable waste solid; 1,760 gallons of waste chromic acid; 2,960 gallons of non-hazardous solid; 74 cubic yards of contaminated debris; and 51,600 pounds of silicon tetrachloride (SiCl_4).

Until the present, the PRP has assumed responsibility for removal procedures, but nothing has been completed.

3.0 SITE ACTIVITIES

On November 29, 1993, TAT member John Sherrard met with On-Scene Coordinator (OSC) Steve Faryan at the CC site. The TAT and OSC performed a site walk-through and observed numerous uncontrolled drums, tanks, scrap metal, and orange-colored soil in the lagoon/pit areas and "pie-shaped" basin. The TAT also observed numerous broken windows and other signs of vandalism in the buildings and that a large portion of the existing fence was stolen. Five lab packs containing various lab chemicals were located inside the shop building. The OSC requested that the TAT organize an extensive sampling plan as well as arrange for mobilization of a mobile laboratory to perform PCB analysis on soils using the gas chromatograph (GC), to assess the hazards of the facility. The OSC also informed the TAT of the need for a land/aerial survey of the site. Sampling events were tentatively scheduled for the second week in December.

On December 13, 1993, TAT members John Sherrard, Yvette Anderson, and Brad Stimple met with OSC Steve Faryan at the CC site. The first objective of the day was for the TAT to perform a site walk-through to determine the number of drums and tanks, with their corresponding volumes, that still remained on-site from the previous removal. Approximately 325 drums (175 drums containing product and 150 empty drums) and 50 tanks (11 tanks containing

product and 39 empty tanks) still remain on-site (see Figure 2 - Site Features Map). All the tanks and drums that were empty were marked by the TAT with the letters "MT". The TAT also observed numerous piles of scrap metal and cut-up tanks around the site. All of the tanks that were empty had previously been decommissioned (hole cut).

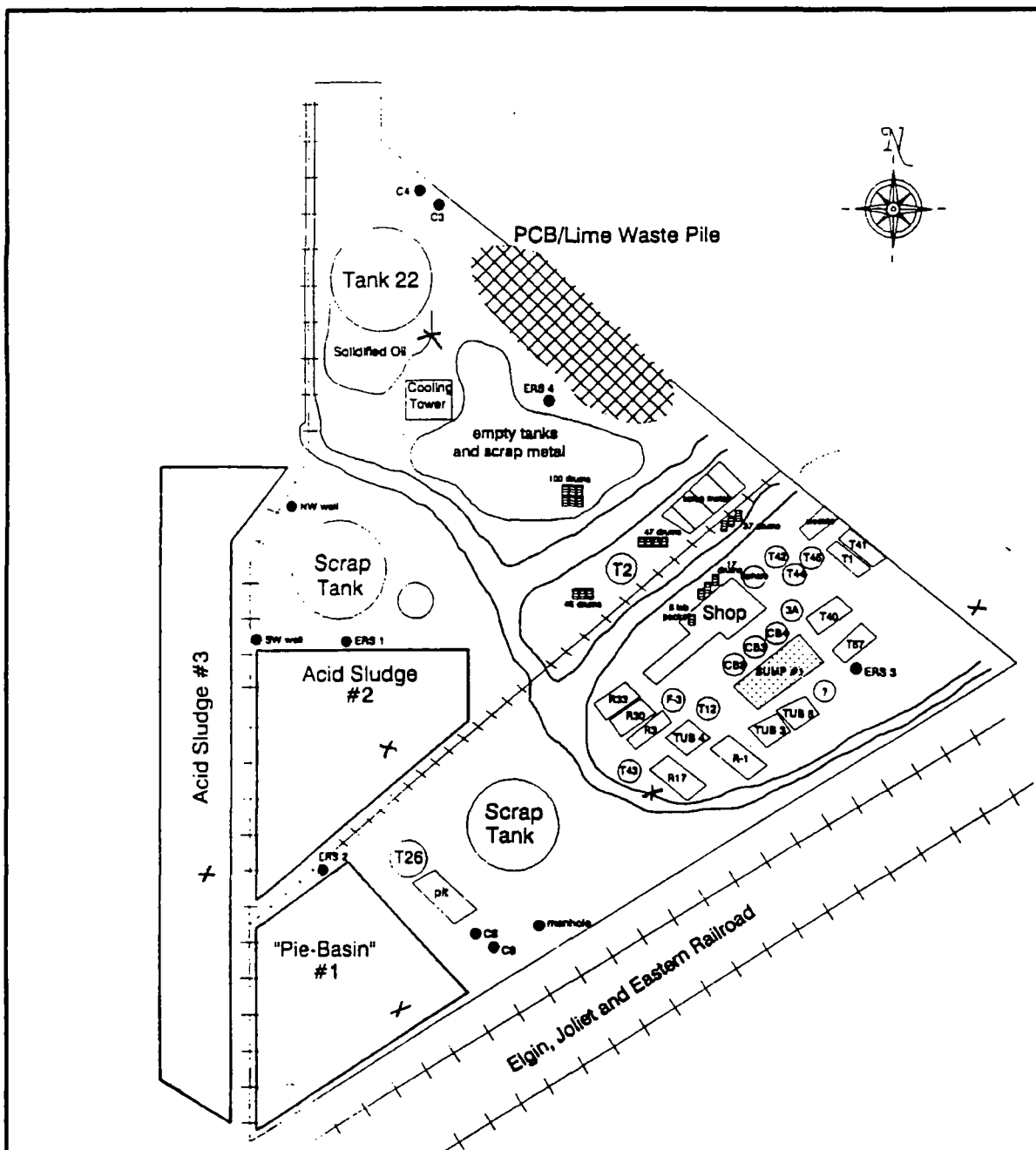
The second objective of the day was to collect soil samples of the lagoon/pit areas and from the PCB/lime waste pile. The TAT collected two soil samples from the "pie-shaped" basin (LP1-SS2 and LP1-SA1), two soil samples from acid-sludge pit #2 (LP2-SA1 and LP2-SA2), one soil sample from acid-sludge pit #3 (LP3-SS1), and three soil samples from the PCB waste pile (WP1 through WP3). See Table 1 for a description of the samples collected and Figure 3 - Site Sampling Location Map.

On December 14, 1993, TAT members Sherrard, Anderson, and Stimple met with OSC Faryan to collect tank and additional soil samples. The TAT collected three soil samples (S-1 through S-3), six tank samples (T1 through T6), and one sludge sample (P-1). See Table 1 for a description of the samples collected and Figure 3 - Site Sampling Location Map. Samples from December 13 and 14 were hand delivered by the TAT to EMS Heritage Laboratory, 1319 Marquette Drive, Romeoville, Illinois, 60441, under Chain of Custody (COC) #5-22675.

On December 15, 1993, TAT members Sherrard, Anderson, and Stimple met with OSC Faryan to collect drum samples and additional tank and soil samples. The TAT collected one soil sample (S-4), six tank samples (T7 through T12), and two drum samples (DS1 and DS2). See Table 1 for a description of the samples collected and Figure 3 - Site Sampling Location Map. The TAT also collected an additional 15 samples to be analyzed for PCBs by a TAT chemist using mobile laboratory equipment.

On December 16, 1993, TAT members Sherrard, Anderson, and Stimple arrived at the CC site to collect one asbestos sample (A-1) and one tank sample (T13). See Table 1 for a description of the samples collected and Figure 3 - Site Sampling Location Map. Samples from December 15 and 16 were hand delivered by TAT to EMS Heritage Laboratory under COC #5-22679.

Seven additional samples were collected and sent to EA Engineering, 19 Loveton Circle, Sparks, Massachusetts, 21152, under the Quick Turnaround Method (QTM - case #Q0106) laboratory with U.S. EPA under COC #Q-001240. The QTM is a new program initiated by the U.S. EPA and was used as an analytical check with the contracted laboratory. Table 2 describes the QTM samples collected with each individual analysis and Table 3 gives the corresponding analytical results of the QTM samples.



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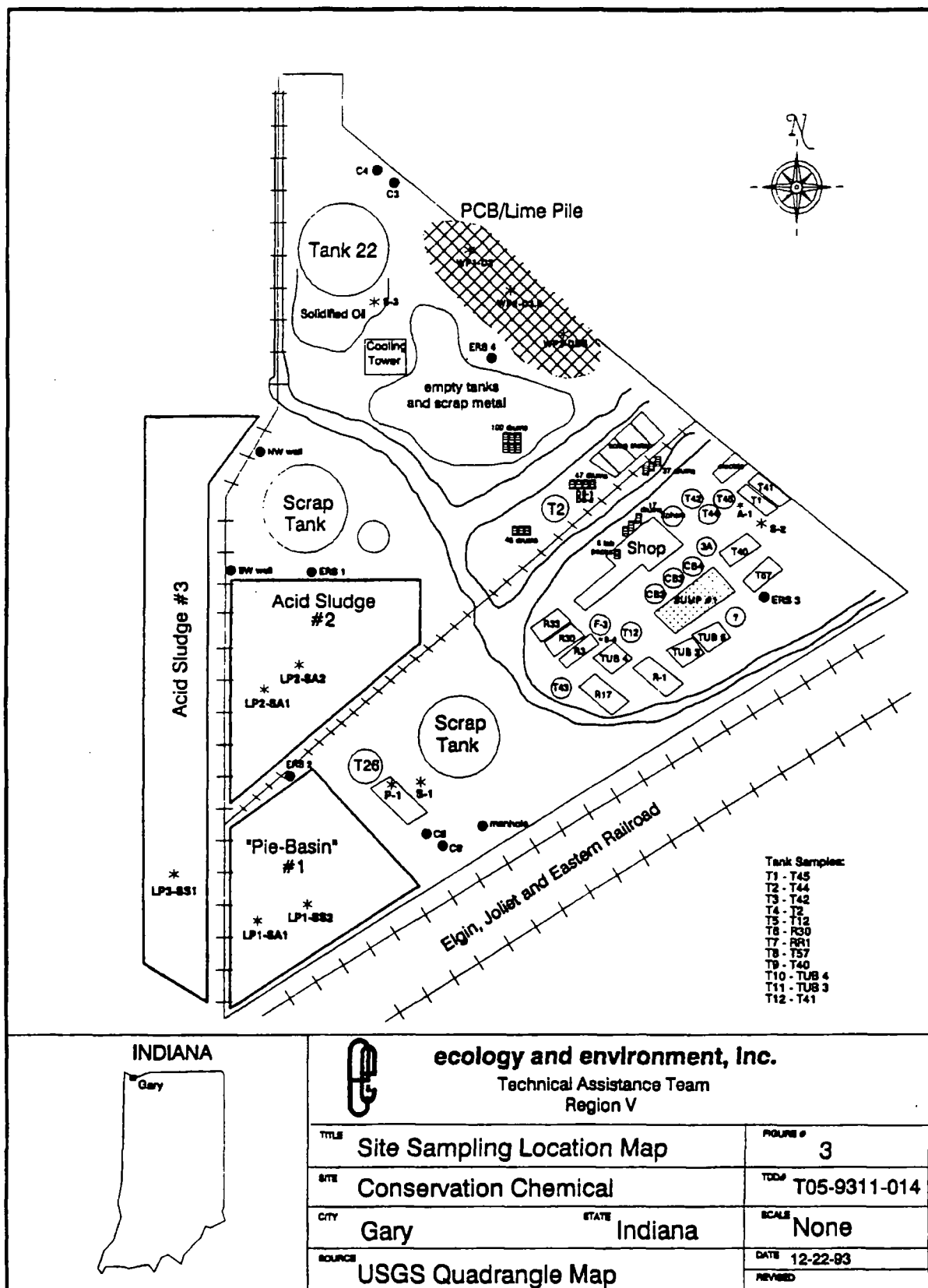
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Region V

TITLE	Site Features Map	FIGURE #	2
SITE	Conservation Chemical	TDD#	T05-9311-014
CITY	Gary	STATE	Indiana
SOURCE	USGS Quadrangle Map	SCALE	None
		DATE	12-22-93
		REVISED	

TABLE 1
CONSERVATION CHEMICAL SITE
GARY, INDIANA
CONTRACT LAB SAMPLE DESCRIPTIONS

S-1	red-brown soil, surface sample next to pit #1, collected on 12-14-93
S-2	dark brown soil, surface sample next to tank #1 where old transformer was located, collected on 12-14-93
S-3	dark brown soil, surface sample next to tank #22 and the solidified oil, collected on 12-14-93
S-4	brown soil, surface composite sample around tub #4 and tank #12, collected on 12-15-93
P-1	red-brown, grey sludge collected from the bottom of pit #1 on 12-14-93
WP1	brown solid, collected at a 2' depth in PCB/lime waste pile on 12-13-93
WP2	black sludge, collected at 3.5' depth in PCB/lime waste pile on 12-13-93
WP3	brown soil, collected at the surface from the PCB/lime waste pile on 12-13-93
LP1-SA1	red-brown soil collected at a 2' depth from "pie-shaped" basin on 12-13-93
LP1-SS2	red-brown soil collected from the surface from "pie-shaped" basin on 12-13-93
LP2-SA1	red-brown soil collected from a 2' depth from acid sludge pit #2 on 12-13-93
LP2-SA2	duplicate of LP2-SA1
LP3-SS1	red-brown soil collected from the surface from acid sludge pit #3 on 12-13-93
T1	light yellow liquid from tank #45 (full), field pH = 13, collected on 12-14-93
T2	brown liquid from tank #44 (full), field pH = 1-2, collected on 12-14-93
T3	light yellow liquid from tank #42 (full), field pH = 1-2, collected on 12-14-93
T4	red-brown liquid from tank #2 (full), collected on 12-14-93
T5	brown-black solid from tank #12 (1/16 full), collected on 12-14-93
T6	yellow liquid from tank R-30 (full), field pH = 0-1, collected on 12-14-93
T7	brown liquid from tank RR1 (1/2 full), field pH = 1-2, collected on 12-15-93
T8	light-yellow liquid from tanker #57 (full), field pH = 12, collected on 12-15-93
T9	yellow liquid from tank #40 (full), field pH = 1-2, collected on 12-15-93
T10	yellow liquid from tub #4 (full), field pH = 1-2, collected on 12-15-93
T11	yellow liquid from tub #3 (full), field pH = 1-2, collected on 12-15-93
T12	brown liquid from tank #41 (1/8 full), field pH = 0-1, collected on 12-15-93
T13	distilled water blank
DS1	brownish sludge drum sample, field pH = 12, collected on 12-15-93
DS2	brownish sludge drum sample, collected on 12-15-93
A-1	white solid, possibly asbestos from bags under tank #1, collected on 12-16-93



INDIANA

Gary



ecology and environment, Inc.

Technical Assistance Team
Region V

TITLE Site Sampling Location Map

FIGURE # 3

SITE Conservation Chemical

TOPIC T05-9311-014

CITY Gary STATE Indiana

SCALE None

SOURCE USGS Quadrangle Map

DATE 12-22-93

REVISED

TABLE 2
CONSERVATION CHEMICAL
GARY, INDIANA
QTM SAMPLE DESCRIPTIONS

<u>Field ID#</u>	<u>Lab ID#</u>	<u>Description</u>	<u>Analysis</u>
T5	QE0013	solid from tank #12	PCB, PAH
WP1	QE0014	solid from PCB/lime waste pile	PCB, PAH
WP2	QE0015	solid from PCB/lime waste pile	PCB, PAH
LP1	QE0016	soil from "pie-basin"	PCB, PAH
LP2	QE0017	soil from acid-sludge pit #2	PCB, PAH
P-1	QE0018	sludge from pit #1	PCB,PAH,VOA
S-5	QE0019	soil from railroad tracks	PCB, PAH

TABLE 3
CONSERVATION CHEMICAL
GARY, INDIANA
GTM ANALYTICAL RESULTS

Analytes	T5 QE0013	WP1 QE0014	WP2 QE0015	LP1 QE0016	LP2 QE0017	P-1 QE0018	S-5 QE0019
<u>Non-Carcinogen PAHs</u>							
Naphthalene	0.33	5.8	3.2	0.29	0.33	1	0.05
Benzo(g,h,i)perylene	0.33	2.6	1.5	3.8	0.33	0.33	0.33
Acenaphthylene	0.33	30	45	3.1	0.33	0.19	0.04
Acenaphthene	0.07	75	54	5.4	0.33	0.69	0.33
Fluorene	0.17	110	87	16	0.33	1.1	0.09
Phenanthrene	0.5	110	78	49	0.33	1.9	0.35
Anthracene	0.27	67	65	>160	0.33	0.63	0.25
Pyrene	0.33	86	72	>200	0.4	2	0.8
Fluoranthene	0.5	62	56	>45	0.41	3.4	0.83
SUB-TOTAL	3	548	462	>483	4	12	4
<u>Carcinogen PAHs</u>							
Benzo(a)anthracene	0.33	18	14	>38	0.33	0.08	0.13
Chrysene	0.03	25	21	>65	0.24	0.36	0.49
Benzo(b,k)fluoranthene	0.33	15	26	13	0.33	0.33	0.31
Benzo(a)pyrene	0.33	9.9	4.9	8.1	0.33	0.57	0.06
Ideno(1,2,3-cd)pyrene	0.33	0.33	3	2.3	0.33	0.33	0.22
Dibenzo(a,h)anthracene	0.33	1.5	---	2.8	0.33	0.33	0.33
SUB-TOTAL	2	70	69	>130	2	2	1.5
<u>PCBs</u>							
PCB Total	0.22	14.9	14.3	7.1	2.4	0.7	0.6
<u>Volatile Organics</u>							
	NA	NA	NA	NA	NA		NA
Vinyl Chloride						0.74	
1,1-Dichloroethene						>76	
Trans-1,2-Dichloroethene						4.7	
1,1-Dichloroethane						>55	
Chloroform						2.4	
1,1,1-Trichloroethane						720	
Carbon Tetrachloride						0.4	
Benzene						12	
1,2-Dichloroethane						>39	
Trichloroethene						650	
Bromodichloromethane						0.4	
Toluene						>630	
Tetrachloroethene						>330	
Chlorobenzene						3.6	
1,1,2,2-Tetrachloroethane						0.4	
Ethylbenzene						>160	
Bromoform						0.4	
M,P-Xylene						>420	
O-Xylene						>150	

* All concentrations are given in parts per million (ppm)
NA = sample not analyzed for this parameter

3

All soil samples collected on site were collected in Level D personal protection. Sampling gloves were changed before each sample was collected. Sampling equipment was either disposed after one use or decontaminated after each sample, using an Alconox solution. All personal protective equipment (PPE) was collected in empty drums and left on-site. Photodocumentation of each sample was performed and can be found in Appendix A.

4.0 ANALYTICAL RESULTS

Analytical results were collected by the TAT from two drums, twelve tanks, one pit, three waste pile samples, nine soil samples, and one asbestos sample. A complete listing of analytical results can be found in Table 4. The analytical results of the PCB screening using the GC and each respective sample description can be found in Table 5.

Various concentrations of volatile and semi-volatile analytes (VOAs and SVOAs) were detected. Most notable VOA results were the presence of acetone detected at 5,400,000 micrograms per kilogram ($\mu\text{g/kg}$) in T4; 1,1,1-trichloroethane at 720,000 $\mu\text{g/kg}$ in P-1; dichloromethane at 590,000 $\mu\text{g/kg}$ in T4; and greater than 630,000 $\mu\text{g/kg}$ of toluene in QE0018 (P-1); isophorone from 380,000 $\mu\text{g/kg}$ in DS-2 and 780,000 $\mu\text{g/kg}$ in DS-1; and trichloroethene at 650,000 $\mu\text{g/l}$ in QE0018 (see Appendix B for complete validated analytical results).

Results of the Toxicity Characteristic Leaching Procedure (TCLP) metals analysis indicated the presence of chromium at 23 milligrams per liter (mg/l) to 32 mg/l in the two samples collected from the material in the "pie-shaped" basin (LP1-SS2 and LP1-SA1).

Sample T4 recorded a flash point of 65°F, which, according to 40 CFR Section 261.21, is considered a Resource Conservation and Recovery Act (RCRA) characteristic hazardous waste by virtue of ignitability (flash point of less than 140°F).

Sample A-1 tested positive for asbestos with an amosite asbestos result of 45%.

Various concentrations of PCBs were detected in most of the soil samples and waste pile samples. The highest concentrations detected were 33.8 mg/kg in sample WP2 and 31.3 mg/kg in sample WP3.

Samples T2, T3, T5 through T7, and T9 through T12 all had pH readings below 2, and samples T1 and T8 had pH readings above 13, which, according to 40 CFR Section 261.22, is considered a RCRA characteristic hazardous waste by virtue of corrosivity (pH less than or equal to 2 or greater than or equal to 12.5). All three

TABLE 4

(F)

CONSERVATION CHEMICAL SITE
GARY, INDIANA

CONTRACT LAB ANALYTICAL RESULTS

Analytes	LP1-SS2	LP1-SA1	LP2-SA1	LP2-SA2	LP3-SS1	WP1	WP2	WP3	S-1	S-2	S-3	S-4
pH	4.3	6.1	6.8	7.0	4.8	12	12	11	5.2	8.2	NA	6.8
PCBs	3.4	22.7	16.9	BDL	BDL	10.5	33.8	31.3	1.4	BDL	23.7	BDL
TCLP RCRA Metals												
Barium (100ppm)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.5	BDL	BDL	14
Cadmium (1 ppm)	0.31	0.56	0.26	0.26	BDL	BDL	BDL	0.02	BDL	BDL	BDL	BDL
Chromium(5 ppm)	23	32	0.17	0.23	BDL	0.11	BDL	0.19	0.37	BDL	0.11	BDL
Lead (5 ppm)	0.3	BDL	BDL	BDL	BDL	0.36	BDL	BDL	BDL	BDL	BDL	BDL
Silver (5 ppm)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.1	BDL	BDL	BDL
Arsenic (5 ppm)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Selenium(1 ppm)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Mercury(.2 ppm)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Cyanides												
Reactive Cyanide	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	NA	BDL	NA
Total Cyanide	NA	22	NA	NA	NA	NA	NA	NA	13	NA	1.6	NA
SVOAs												
Phenanthrene	BDL	NA	NA	NA	NA	11	NA	NA	NA	BDL	NA	NA

* All concentrations except pH are given in parts per million (ppm).

** BDL = Below Detection Limit NA = sample not analyzed for this parameter

*** See Appendix B for a complete list of SVOAs analyzed.

(continued)

TABLE 4 (continued)

CONSERVATION CHEMICAL
GARY, INDIANA

CONTRACT LAB ANALYTICAL RESULTS

Analytes	T1	T2	T3	T4	T5 ⁽²⁾	T6	T7	T8	T9	T10	T11	T12
pH	>13	1.7	1.9	6 ⁽¹⁾	1.2	1.0	1.0	>13	1.0	1.0	2.0	1.0
PCBs	NA	NA	NA	NA	BDL	NA	NA	NA	NA	NA	NA	NA
Total RCRA Metals												
Barium	BDL	BDL	BDL	NA	4.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Cadmium	BDL	BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chromium	BDL	11	14	NA	0.23	2.8	7.7	BDL	BDL	BDL	BDL	32
Lead	BDL	35	30	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	21
Silver	BDL	BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Arsenic	BDL	BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Selenium	BDL	BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Mercury	BDL	BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Cyanides												
Reactive CN ⁻	BDL	NA	NA	NA	BDL	NA	NA	NA	NA	NA	NA	NA
Total CN ⁻	1.1	NA	NA	NA	1.7	NA	NA	NA	NA	NA	NA	NA
Sulfides												
Sulfide	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Incineration Parameters												
Flash Point				65 ⁰ F								
Btu				BDL								
Total Organic Carbon				29,600 mg/l								
Total Organic Halide				123 mg/l								
SVOAs												
Isophorone	NA	NA	NA	120	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic Acid	NA	NA	NA	12	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	6	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	17	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	14	NA	NA	NA	NA	NA	NA	NA	NA
VOAs												
Acetone	NA	NA	NA	5400	NA	NA	NA	NA	NA	NA	NA	NA
Dichloromethane	NA	NA	NA	590	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	NA	NA	NA	280	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	NA	NA	NA	400	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	NA	NA	NA	130	NA	NA	NA	NA	NA	NA	NA	NA

* All concentrations except pH are given in parts per million (ppm).

** BDL = Below Detection Limit NA = sample not analyzed for this substance

*** See Appendix for a complete list of SVOAs and VOAs analyzed

(1) = Results found from field testing

(2) = TCLP RCRA Metals was analyzed for this solid sample

(continued)

TABLE 4 (continued)

CONSERVATION CHEMICAL
GARY, INDIANA

CONTRACT LAB ANALYTICAL RESULTS

Analytes	T-13	A-1	P-1	DS-1	DS-2
pH	9.2	NA	NA	11	12
PCBs	NA	NA	18	BDL	BDL
TCLP RCRA Metals					
Barium	BDL	NA	BDL	BDL	BDL
Cadmium	BDL	NA	0.31	1.7	0.07
Chromium	BDL	NA	0.42	0.09	BDL
Lead	BDL	NA	BDL	BDL	BDL
Silver	BDL	NA	0.08	0.11	BDL
Arsenic	BDL	NA	BDL	BDL	BDL
Selenium	BDL	NA	BDL	BDL	BDL
Mercury	BDL	NA	BDL	0.21	0.006
Cyanides					
Reactive CN ⁻	NA	NA	11	3.8	BDL
Total CN	NA	NA	240	530	110
Asbestos					
Amosite Asbestos	NA	45%	NA	NA	NA
Cellulose	NA	5%	NA	NA	NA
Synthetics/Hair	NA	<1%	NA	NA	NA
Binder	NA	50%	NA	NA	NA
Result	NA	POS	NA	NA	NA
SVOAs					
Acenaphthene	NA	NA	BDL	19	11
Bis(2-ethylhexyl)phthalate	NA	NA	11	50	27
Dibenzofuran	NA	NA	BDL	BDL	9.3
1,2-Dichlorobenzene	NA	NA	28	150	100
Fluoranthene	NA	NA	BDL	35	20
Fluorene	NA	NA	BDL	27	16
Isophorone	NA	NA	44	780	380
2-Methylnaphthalene	NA	NA	25	95	70
Naphthalene	NA	NA	23	120	82
Phenanthrene	NA	NA	18	80	47
Pyrene	NA	NA	BDL	43	21
4-Methylphenol	NA	NA	BDL	41	75
Phenol	NA	NA	BDL	95	54

* All concentrations except pH are given in parts per million (ppm).

** BDL = Below Detection Limit NA = sample not analyzed for this substance

*** See Appendix for a complete list of SVOAs and VOAs analyzed

TABLE 5
CONSERVATION CHEMICAL
GARY, INDIANA
PCB ANALYTICAL RESULTS

<u>Sample</u>	<u>Description</u>	<u>PCB result (ppm)</u>
F-1	PCB waste pile, dry brown soil	14
F-2	PCB waste pile, brown-black solid	3
F-3	PCB waste pile, brown-black solid	8
F-4	solid in tank #22, wet sediment	non-detect
F-5	area in front of tank #22, brown-black solid	4
F-6	bank of lagoon next to tank #22, sediment	7
F-7	soil north of acid-sludge pit #2, black tar-like solid	non-detect ⁽¹⁾
F-8	brown material in scrap tank north of acid-sludge pit #2	42
F-9	brown soil from acid-sludge pit #2	non-detect
F-10	brown sediment from "pie-basin"	non-detect
F-11	clay soil from "pie-basin"	non-detect
F-12	clay soil from acid-sludge pit #3	non-detect
F-13	brown solid from tank #12	non-detect
F-14	brown soil next to tank #1 where transformer was located	non-detect
F-15	brown soil, composite sample S-4	non-detect
F-16	duplicate of F-8	46

detection limit = 5 ppm

(1) detection limit = 10 ppm

* All reported as Arochlor 1248 (could also be Arochlor 1242) not corrected for moisture content

8

waste pile samples (WP1 through WP3) and both drum samples (DS-1 and DS-2) had pH readings of 11 or greater.

Reactive and total cyanide analysis was performed on eight samples. Readings from 22 mg/kg (soil sample, LP1-SA1) to 530 mg/kg (drum sample, DS-1) of total cyanide and 11 mg/kg (sludge sample, P-1) of reactive cyanide were recorded.

High polyaromatic hydrocarbon (PAH) concentrations results were detected in the PCB/lime waste pile (greater than 500 ppm - QE0015) and in the "pie-shaped" basin (greater than 600 ppm - QE0016) using the QTM laboratory.

5.0 DISCUSSION OF POTENTIAL THREATS

Conditions present at the CC site may constitute an imminent and substantial threat to public health and welfare and the environment, based upon considerations set forth in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Section 300.415 (b) (2), and therefore may justify that a time-critical removal action be conducted at the CC site. These conditions include, but are not limited to, the following:

- * Actual or potential exposure to nearby populations, animals, or the food chain from hazardous substances, pollutants, or contaminants.

Evidence of acts of vandalism was observed by TAT throughout the site. All the windows in the buildings were broken and a section of the fence from the south side of the site was stolen, providing minimal security and easy access to nearby human and animal populations.

Five uncontrolled lab packs containing various lab chemicals were located in the on-site building and can be easily accessible to the population.

Significant concentrations of PCBs were detected in samples LP1-SA1 (22.7 mg/kg or ppm), WP2 (33.8 ppm), WP3 (31.3 ppm), and S-3 (23.7 ppm). Dermal effects of PCBs causes skin irritation, such as acne and rashes. Asbestos was determined to be present from sample A-1. The inhalation of friable asbestos is known to cause lung cancer. These contaminants, as well as the others, could be ignited, inhaled, or come in contact with the human population and pose an imminent and substantial threat to public health and welfare and the environment.

- * Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.**

Site investigations by the TAT identified approximately 175 drums and 12 tanks containing acid liquids with a pH of between 0 and 2 and caustic liquids with a pH of over 12.5. According to paragraph (a) (1) of 40 CFR Section 261.22 of the NCP, an aqueous liquid with a pH less than or equal to 2, or greater than or equal to 12.5, is considered to exhibit the criteria for corrosivity. Analytical sample results revealed concentrations of chromium above 5 mg/kg or ppm. According to paragraph (a) of 40 CFR Section 261.24 of the NCP, if an extract from a representative sample of the waste contains any of the contaminants listed in Table 1 of Section 261.24 at the concentration equal to or greater than the respective value, the sample is considered to exhibit the characteristic of toxicity. Analytical results indicated a sample having a flash point of 65°F. According to paragraph (a) (1) of 40 CFR Section 261.21 of the NCP, a liquid with a flash point less than 140°F is considered to exhibit the criteria for ignitability. According to paragraph (a) of 40 CFR Section 261.20 of the NCP, a hazardous waste is present if it represents any of the following characteristics: ignitability, corrosivity, reactivity, or toxicity.

Inhalation is the most important route of exposure for acetone. Symptoms of inhalation of acetone include nose, throat, and serious eye irritation; headaches; dizziness; confusion; nausea; and vomiting. Ingestion of acetone has caused comas, kidney damage, and metabolic changes. Dermal contact causes skin inflammation. In addition, chromium is a known carcinogen. Positive cyanide results were recorded from the drums on-site. The possibility exists for combining the acids and the cyanides to create deadly hydrogen cyanide gas.

- * Threat of fire or explosion**

Sample T4 had a flash point of 65°F and was found to contain 5,400,000 µg/kg of acetone. Acetone is a highly flammable liquid, and presents a dangerous disaster hazard due to its propensity for fire and explosion and its ability to react violently with oxidizing materials.

- * Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.**

All of the uncontrolled drums and tanks are exposed to the weather. The possibility exists that the contents of the drums

and tanks could be released if the containers or valves rupture from freezing and expanding or by overflow due to events of heavy precipitation. Many of the drum lids and sides of the drums have corroded. The contents of several drums were visibly leaking from the sides and migrating into the ground due to corrosion of the containers.

6.0 REMOVAL ACTION

Mitigation of the threats described above requires the removal of approximately 90,500 gallons of acidic liquids, 25 cubic yards of acidic solids, 52,500 gallons of caustic liquids, 45 drums of caustic solids, 35,000 gallons of flammable liquids, 10,000 cubic yards of chromium contaminated soil, 130 drums of hazardous waste solids, 5,000 cubic yards of PCB/lime waste solids, 5 lab packs, and bags of asbestos. A two-phase removal action which implements off-site disposal is as follows.

6.1 Removal Action - Phase I

Phase I of the removal action would begin with the mobilization of the Emergency Response Cleanup Contractor Service (ERCS) to the site, the development of a site health and safety plan, securing the site, hazard categorization (hazcatting) of materials in each container and separation of drums and tanks into appropriate waste streams, compositing waste streams, compositing chromium contaminated soil, compositing PCB/lime contaminated soil, sending out composites for disposal parameters analysis, sending composites to appropriate waste facilities for waste approval, and subcontracting a firm to remove and dispose of the asbestos.

6.2 Removal Action - Phase II

Phase II of the removal would consist of sending the acidic liquids, caustic liquids, and cyanide drums off-site for disposal by treatment; the acidic solid waste and asbestos off-site to a landfill; the chromium contaminated soil and the drums of hazardous solids off-site for treatment and landfill disposal; the PCB/lime waste pile off-site to a special waste landfill; and the flammable liquid waste and lab packs off-site for treatment by incineration. The disposal would be followed by decontaminating and cutting up all of the tanks and vats on-site. The final stages of the site would be to send off all usable metal to a scrap yard and then demobilization from the CC site.

7.0 ESTIMATED COSTS

The cost estimation prepared for the mitigation of threats at the CC site addresses the disposal of all hazardous waste on-site and the demolition of all structures on-site. Estimated costs are based on the treatment technologies stated in section 6.1 with a 20% contingency factor. The disposal of the hazardous waste on-site is estimated to require 110 11-hour working days plus mobilization and demobilization time, and to cost approximately \$4,762,765. The cost estimate was generated by the Removal Cost Management System (RCMS). A copy of the cost estimate is presented in Appendix J.

8.0 SUMMARY

The removal of the hazardous materials from the CC site by U.S. EPA and the PRPs effectively mitigated some of the threats to human health and the environment. As of December 13, 1993, the following hazardous substances and conditions still remained present at the CC site:

- a. Several tanks in the production area of the facility still contain acidic liquids and solids (approximately 90,500 gallons and 15 yd³) and caustic liquids (approximately 52,500 gallons). Several other tanks are partially filled with sludges containing hazardous substances.
- b. Tank #2 contains approximately 35,000 gallons of an unknown waste solvent with a flash point of 65°F. Approximately 125 drums containing 2,750 gallons of flammable waste solvents and sludges are stored at the site.
- c. Three unsecured lagoons contain several thousand tons of sludge consisting of spent pickle liquor, heavy metals, oil products, and other hazardous materials.
- d. Asbestos is still exposed and not properly contained.
- e. Five uncontrolled lab packs are still located on-site.
- f. Approximately 45 drums of cyanide material still remain on-site.
- g. Approximately 5,000 cubic yards of hazardous waste solids (PCB/lime waste pile) is stored to the east of Tank #22.

Previous site investigations have been conducted at the CC site and have documented the site to be an imminent and substantial threat to the public health and welfare and the environment (see

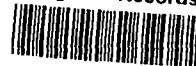
Appendices D - I for previous site investigation reports). The TAT site assessment conducted on December 13 through 15, 1993 indicates that conditions at the CC site require immediate attention due to the nature of the hazardous substances that remain on-site and the easy access by human and animal populations to uncontrolled drums and tanks containing RCRA hazardous waste. If left unchecked, the possibility exists of migration of these wastes into the environment.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

0000024

EPA Region 5 Records Ctr.



225072

FEB 21 1997

REPLY TO THE ATTENTION OF:

MEMORANDUM

DATE:

SUBJECT: ACTION MEMORANDUM - Determination of Threat to Public Health or Welfare or the Environment at the Conservation Chemical Site in Gary, Indiana (Site ID# Y1)

FROM: Steven J. Faryan, On-Scene Coordinator
Emergency Response Branch

TO: William E. Muno, Director
Superfund Division

THRU: Rick Karl, Chief Emergency
Response Branch

I. PURPOSE

The purpose of this memorandum is to document the determination of an imminent and substantial threat to public health and the environment posed by the presence of hazardous substances at the Conservation Chemical Company of Illinois, Inc. Site, located at 6500 Industrial Highway, Gary, Indiana. At this point in time, it is anticipated that this removal action will be carried out by a group of the Potentially Responsible Parties ("PRPs"), pursuant to an Administrative Order on Consent (that has not yet been negotiated). There are no nationally significant or precedent-setting issues associated with the response action.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal Site evaluation

The Conservation Chemical Company of Illinois, Inc., Site ("CCCI Site" or "the Site") has been assigned the CERCLIS identification number: INDO40888992. Prior to 1967, the Site property was owned by the Berry Oil Company which operated an oil refinery on the property. In 1967, the Conservation Chemical Company of Illinois, Inc., acquired the property from the Berry Oil Company, and operated a chemical reclaiming, transport, storage and disposal facility on the site. The hazardous substances presently found on-site were released onto the property as the result of the above-described operations.

2. Physical location

The Site is a 4.1-acre, triangular-shaped piece of land located in an industrial area in Gary, Indiana. It is situated north of and adjacent to the Gary Municipal Airport's main runway. The Site is bound by the Western Scrap property to the North, the Elgin, Joliet and Eastern Railroad to the South and a wetland to the West.

3. Site characteristics

There is no federally-owned facility located on-site. At the present time, there are no operations being conducted on-site. Prior to 1967, however, the Berry Oil Company operated an oil refinery at the Site, and from 1967 through 1985, the Conservation Chemical Company of Illinois, Inc. (CCCI), conducted operations at the Site involving hazardous substances and wastes. CCCI stored and treated spent acids, oils, and solvents; produced ferric chloride from spent pickle

liquor; and operated as a hazardous waste terminal and treatment facility for hazardous substances including, but not limited to acids, cyanide, solvents, plating waste and waste oils. Releases of hazardous substances have occurred on-site as a result of the operations of the Berry Oil Company and CCCI.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant.

From December 1993 through July 1994, U.S. EPA conducted a site assessment to document the threats at the CCCI Site. The site inspection documented 12 tanks containing acids or solvents; a number of empty tanks with an acid or caustic residue; a number of drums containing acids or caustic liquids; a number of empty drums with an acid or caustic residue; soil contaminated with hazardous substances; lagoons/sludge pits containing hazardous substances; five thousand cubic yards of PCB-contaminated soil, five uncontrolled lab packs containing laboratory chemicals; and contaminated groundwater.

Laboratory analysis of the samples taken during the site investigation revealed the presence of the following hazardous substances and hazardous wastes on-site: high concentrations of volatile and semi-volatile compounds in Tank 4 and in P-1 (Cement pit); high concentrations of solvents in solid samples taken from drum sample 1 (DS-1) and drum sample 2 (DS-2); sludge-material samples collected from the pie-shaped basin were hazardous by the RCRA definition for chromium; samples taken from tank 4 (T-4) indicated a flash point of 65° F, which, according 40 C.F.R. § 261.21, is a RCRA characteristic hazardous waste by virtue of ignitability (flash point of less than 140 degrees F.); sample A-1 tested positive for asbestos with an amosite asbestos result of 45%; samples T2, T3, T5 through T7, and T9 through T12 all indicated pH readings below 2, and sample T1 and T8 had pH readings above 13, which, according to 40 C.F.R. § 261.22, is considered a RCRA-characteristic hazardous waste by virtue of corrosivity (pH less than or equal to 2 or greater than or equal to

12.5); reactive and total cyanide was detected in the pie-shaped basin and in drum sample 1 (DS-1) and drum sample 2 (DS-2) and Pit 1; high polycyclic aromatic hydrocarbons (PAHs) concentrations were detected in the PCB/lime waste pile (greater than 500 ppm) and in the "pie-shaped basin" (greater than 600 ppm); PCB concentrations were also detected in the waste pile; soil borings collected during the Geoprobe testing indicated high levels of volatile organic solvents such as Trichloroethane, ranging as high as 960 ppm in soils from SB-1; cyanide was detected at 270 ppm in SB-4 and SB-3; SB-6 indicated elevated levels of cyanide; ground water samples collected during the Geoprobe investigation indicated high levels of chlorinated solvents such as Trichloroethene (as high as 45,000 ppb); sample GPW-3 was found to contain 3,100 ug/l of acetone; and six inches of a floating chemical layer were observed in Monitoring Well ERS-3.

The hazardous wastes and hazardous substances described above are in open and deteriorating drums and tanks, as well as in open waste piles and waste lagoons. The hazardous substances have been observed leaking onto the ground from the above-described containers, and, thus, demonstrate actual releases to the environment. The ground water and soil in the eastern one-third of the Site are most impacted by past spills and releases. The City of Gary Airport has reported numerous releases from the Site into the drainage ditch on airport property which drains to the Calumet River and then into Lake Michigan. Further, during the site investigation, it was found that the Site is not completely secure and is easily accessible because of missing sections of fencing around the Site. This affords access to the Site by human and animal populations, creating the potential for direct contact with hazardous substances, as described above.

5. NPL status

The Site is not on the National Priorities List, 40 C.F.R. Part 300, Appendix B.

B. Other Actions to Date

1. Previous actions

From October 1985 through September 1990, EPA conducted limited, but substantial removal activities at the Site, including, but not limited to the construction a fence to secure the Site; excavation, sampling and disposal of buried drums containing hazardous substances; consolidation of hazardous waste from severely deteriorating and leaking drums and tanks and placement of said hazardous waste into more structurally sound tanks on-site; and disposal of solid and liquid hazardous waste from certain tanks and drums. In connection with the removal activities described above, the Agency disposed of 187,948 gallons of PCB-contaminated oil; 214.78 tons of PCB-contaminated soil; 1,941 gallons of liquid hazardous waste; 60 tons of hazardous waste solids; 15,300 gallons of flammable waste liquid; 112 gallons of flammable waste solid; 1,760 gallons of waste chromic acid; 2,960 gallons of non-hazardous solid; 74 cubic yards of contaminated debris; and 51,600 pounds of silicon tetrachloride.

On September 27, 1985, the Agency issued a CERCLA Section 106(a) Unilateral Administrative Order to the owner-operator of Conservation Chemical Company of Illinois and 18 generator-PRPs that were associated with the Site. A supplemental Unilateral Administrative Order was issued by EPA to the same Respondent(s) on November 22, 1985. Pursuant to the UAOs, a group of the generator-PRPs conducted limited, but significant removal activities at the Site, including constructing a fence around a portion of the Site for security purposes, removal and disposal of acids from 4 tanks; removal and disposal of acid sludge from 1 tank; removal and disposal of cyanide from 13

tanks; and dismantling a tower used to store cyanide, and disposal of the tower's cyanide-contaminated building materials.

C. State and Local Authorities' Roles

1. State and local actions to date

The Indiana Department of Environmental Management has requested U.S. EPA assistance to conduct a removal action at the CCCI Site. IDEM is fully supportive of the time critical removal action and will support U.S. EPA if necessary.

2. Potential for continued State/local response

Neither IDEM or the City of Gary have the financial resources to conduct this time-critical removal action.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to Public Health, Welfare or the Environment

The conditions documented at the Site constitute a threat to public health, welfare, or the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended ("NCP"), 40 C.F.R. § 300.415(b)(2). These factors include, but are not limited to, the following:

Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants; this factor is present at the Site due to the existence of loose friable asbestos, cyanide chromium and acid liquid and sludge found in soil, drums and tanks, uncontrolled surface impoundments, and five uncontrolled lab packs containing laboratory chemicals. It is estimated that humans and animals in the general area of the Site may be exposed to toxic fumes in the event of an explosion or fire or chemical reaction with the acid and cyanide material which evolves hydrogen cyanide a lethal chemical asphyxiant. In addition, it is possible that any

humans who enter the Site without protective clothing may come into contact with hazardous substances.

Actual or potential contamination of drinking water supplies or sensitive ecosystems; this factor is present at the Site due to the existence of wetlands located directly to the south of the Site, and the fact that surface water drainage runs southward toward the wetlands. A floating chemical layer has been observed seeping into an unnamed drainage ditch across the railroad tracks, 180 feet southeast of the Site. This ditch leads to the Calumet River and then into Lake Michigan, a drinking water source.

Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release; this factor is present at the Site due to the existence of at least 175 drums and 12 tanks containing acid and caustic liquids, and drums containing cyanide.

High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate; this factor is present at the Site due to the existence of significant concentrations of volatile organic compounds, semi-volatile compounds, and cyanide found in open lagoons, piles, and surface soil, and PCB-contaminated soil and chromium-contaminated soil and sludge, that may migrate off-site.

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; this factor is present at the Site due to the existence of severe cold-weather conditions, (including snow, icing, freeze-thaw phenomena and extreme cold temperatures) in the fall and winter seasons. These conditions would adversely affect the tanks, drums, surface impoundments, and contaminated soils, all of which are exposed to the elements.

Threats of fire or explosion; this factor is present at the Site due to the existence of a tank containing acetone with a flash point of 65 degrees that has a propensity for fire and explosion, and has the ability to react violently with

oxidizing materials.

Other situations or factors that may pose threats to public health or welfare or the environment; this factor is present at the Site due to the existence of vandalism problems, such as missing sections of fencing around the Site that could facilitate easy access to the Site (and hazardous substances) by humans and animal populations. The three vertical tanks full of acid and caustic liquids have easily accessible valves which could be opened to allow the release of hazardous substances into the environment. These acid liquids, if released, could react with cyanide-contaminated soils and cyanide drums, causing a release of hydrogen cyanide, an extremely poisonous substance and chemical asphyxiant.

The unavailability of other appropriate federal or state response mechanisms to respond to the release; this factor supports the actions required by this Order at the Site because the Indiana Department of Environmental Management (IDEM) is unable to financially support the clean up action but has been notified and has supported of all pending removal actions at the Site.

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the hazardous substances on Site, and the potential exposure pathways to nearby populations described in Sections II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS

A. Proposed Actions

1. Proposed action description

The following removal activities are to be implemented at the Site to mitigate the threats posed by the presence of hazardous substances at the CCCI Site.

- a. Prepare a Removal Action Work Plan to assess and mitigate the documented threats posed by contaminants found on Site. This Removal Action Work Plan shall address the identification, containment, and disposal or treatment of the above mentioned hazardous substances or hazardous wastes. The Work Plan will include as attachments a Health and Safety Plan, a Quality Assurance/Quality Control Plan, and a site-specific Sampling Plan.
- b. Immediately control access to the Site by repairing and/or constructing fences, and providing appropriate site security;
- c. Tarp or overpack leaking or open drums, waste piles and open surface impoundments;
- d. Design a site-specific sampling plan which provides for the collection of samples from all drums, tanks, soil, pits, lagoons, asbestos, lab packs, and any other identified areas; the collection of composite samples of appropriate waste streams, chromium contaminated soils, lagoon sludge, PCB/lime waste pile, liquid waste stream and any other identified waste streams; the performance of analytical methods for disposal parameters; and the transport of appropriate samples to waste facilities which are in compliance with the CERCLA off-site rule.
- e. Perform sampling and analyses of all drums, tanks, soil, pits, lagoons, asbestos, lab packs and any other identified areas, as per the site-specific sampling plan. This shall include the collection of composite

samples of appropriate waste streams, including, but not limited to chromium-contaminated soils, PCB-contaminated soils/PCB-lime waste pile, liquid wastes, and any other identified waste stream for analysis of disposal parameters. Appropriate composite samples shall be collected and sent to waste facilities for disposal acceptance (facilities must be in compliance with the CERCLA off-site Rule).

f. Perform hazard categorization (hazcatting) analyses to assess the viability of bulk-loading and disposal of the liquid wastes. Segregate drums and containers into compatible waste streams based on hazcatting analyses.

g. Conduct an extent of contamination study to characterize the surface and sub-surface soil contamination. Surface and sub-surface samples shall be analyzed for PCBs, TCL and TAL parameters, Cyanide, TCLP parameters, and other RCRA characteristic analytes.

h. Conduct a geophysical survey to identify areas where suspected buried drums are located.

i. Perform a Treatability Study on the three waste lagoons to assess the viability of on-site stabilization as a viable response action. If successful, the two lagoons located on the CCCI property will be stabilized in place, and the third lagoon will be moved onto the CCCI property and stabilized, if necessary. The stabilizing materials will be capped with clay.

j. Inventory all existing CCCI-related ground water monitoring wells at the Site and determine which of these wells are functional. Abandon dysfunctional ground water monitoring wells as per IDEM regulations. Install necessary new groundwater monitoring wells, as per the site-specific sampling plan and/or the OSC.

k. Conduct ground water sampling from the existing functioning ground water monitoring wells and/or newly installed ground water monitoring wells, and the

existing collection trench (on the Gary Airport property) to assist in the design and implementation of a containment and collection system to be installed on the CCCI Site, along the Southeast border of the Site.

l. Collect air samples, as appropriate, for personnel and general site perimeter air monitoring to assess if dust, volatile organic, PCBs or other contaminants of concerns are below acceptable OSHA standards;

m. Based on results from the initial sampling and extent of contamination study, treat, remove, and properly dispose of all hazardous substances or hazardous wastes at a RCRA or TSCA-approved facility which is in compliance with the CERCLA off-site Rule. At a minimum, Respondents shall conduct the following removal activities:

(i) Remove and dispose of, or treat acid liquids and solids, caustic liquids and solids, cyanide liquids and solids, solvents and flammable liquids, chromium-contaminated soils, and PCB-contaminated soils, and contaminated waste lagoons.

(ii) Decontaminate steel tanks, lines, drums, and containers, and collect and treat or dispose of waste-water generated. Remove decontaminated steel and debris to an appropriate recycling facility.

(iii) Backfill all excavated areas with clean fill and level to pre-excavation grades.

(iv) Excavate, treat and dispose of contaminated soils at appropriate disposal facilities.

(v) Assess, design and implement a containment and collection system along the Southeast border of the Site to collect and dispose of the floating chemical layer in the groundwater that originates at the CCCI Site.

This system will prevent the release of hazardous substances in the floating layer to the unnamed ditch located on the Gary Airport property, and, eventually, to the Calumet River.

(vi) Conduct an investigation, including sampling and analysis, to determine which structures on-site contain asbestos. Based on the investigation, all friable asbestos will be abated, packaged and disposed of in accordance with applicable regulations, prior to the demolition of all structures containing friable asbestos.

(vii) Demolish all above ground structures and level the Site to grade. All buildings, wood cribbing, abandoned railroad spurs and elevated piping systems will be dismantled and disposed of appropriately.

n. Prepare and implement a verification sampling plan to assess whether appropriate cleanup levels, as specified in the approved Work Plan, have been met for all identified contaminants for all media of concern. The verification sampling shall include, at a minimum, sampling of soil, treated waste, surface water, ground water, ground water collected in the recovery system and any decontaminated buildings or debris. If verification sampling demonstrates that cleanup levels for these contaminants have not been met, conduct additional removal activities as per the direction of the OSC.

2. Applicable or relevant and appropriate requirements (ARARs)

All applicable or relevant and appropriate requirements (ARARs) of Federal Law will be complied with to the extent practicable. A letter has been sent to the IDEM requesting that it identify State ARARs. Any State ARARs identified in a timely manner for this removal action will be complied with to the extent practicable.

3. Post Removal Site Controls

The OSC has begun planning for provision of post-removal site control, consistent with the NCP, 40 C.F.R. Part 300. The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the CCCI Site which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Immediate action is required at the Site due to alleviate the on-going migration of contaminants. In addition, waste lagoons, drums, tanks and contaminated soil containing hazardous substances and hazardous wastes have released or have the potential to release to the soil, groundwater and surface water. Delay or non-action will result in an increased risk of direct human contact with hazardous substances, and migration of contaminants into the soil, groundwater and surface water.

VII. OUTSTANDING POLICY ISSUES

No significant policy issues are associated with the CCCI Site.

VIII. ENFORCEMENT

See the attached ENFORCEMENT ADDENDUM (Enforcement Sensitive).

IX. RECOMMENDATION

This decision document represents the selected removal action for the Conservation Chemical Company of Illinois, Inc., in Gary, Indiana, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP, 40 C.F.R. Part 300. This decision is based on the Administrative Record for the Site (Attachment A).

Conditions at the Site meet the NCP criteria for a removal action, 40 C.F.R. § 300.415(b)(2). I recommend your approval of the proposed removal actions and approval of this Endangerment Action Memorandum documenting threats to public health, and the environment.

APPROVED: _____

W. E. Myers
Director, Superfund
Division

DATE: 2/21/97

DISAPPROVED: _____

Director, Superfund
Division

DATE: _____

cc Cynthia Kawakami, ORC
Beth Guria, ERB, ESS
E. Watkins, U.S. EPA HQ, 5202G
D. Henne, U.S. Department of Interior, w/o Enf. Addendum
IDEM, w/o Enf. Addendum

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REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ENFORCEMENT ADDENDUM
ENFORCEMENT SENSITIVE
FEBRUARY 18, 1997
2 PAGES

REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTIONADMINISTRATIVE RECORD
FOR
CONSERVATION CHEMICAL COMPANY
GARY, INDIANAORIGINAL
OCTOBER 18, 1994

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	10/26/83	Prober, R., Siegel, G., Havens & Emerson Ltd.	Douglas, A., Gary Municipal Airport Authority	Hazardous Waste Assessment (Final)	45
2	01/06/84	Bachunas, C., E & E	St. John, R.	Sampling, Case #2156, Low Water/Low Soil Organics	55
3	05/14/84	Smith, H., E & E	Josif, D., CH2M Hill	Preliminary Sampling	35
4	02/00/85	Weston-Sper	U.S. EPA	Site Assessment	20
5	05/00/85	Weston-Sper	U.S. EPA	Emergency Action Plan	23
6	09/06/85	Porter, J., U.S. EPA	Adamkus, V., U.S. EPA	Action Memorandum, Immediate Removal Request	15
7	09/23/85	Fields, T., U.S. EPA	Porter, J., U.S. EPA	Action Memorandum, \$1 Million Exemption Request	2
8	10/11/85	Murphy, M., Enviresponse, Inc.	Jones, J.	Soil Samples	9
9	10/31/85	Prince, G., U.S. EPA	Simes, B., U.S. EPA	Conservation Chemical Annex, Results of Analyses	29
10	11/20/85	Prince, G., U.S. EPA	Simes, B., U.S. EPA	Letter regarding compilation of data	1
11	11/22/85	Michalowicz, J., Chen, D., Koppen, J., Enviresponse, Inc.	Prince, G., U.S. EPA	Priority Pollutant and RCRA Analysis Vols. II & III	813
12	09/03/86	Simes, W., U.S. EPA	Adamkus, V., U.S. EPA	Action Memorandum- 6-Month Time Exemption	2
13	03/12/87	Internatl. Technology Corporation		Site Action Plan & Appendices A, B, and C, Vols. I & II	460

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14	05/29/90	Pyles, D., Koelling, N., ERS, Inc.	Krikau, F., Fred Krikau & Associates	CCCI Ground Water Investigation Report	181
15	10/12/90	Pyles, D., ERS, Inc.	Krikau, F., 6500 Indust- rial Highway Group	Quarterly Ground Water Monitoring	50
16	02/02/94	Sherrard, J., Ecology & Environment, Inc.	U.S. EPA	Site Assessment/ Removal Action Plan w/Attachments A-J, Vols. I & II	369

UPDATE #1
FEBRUARY 12, 1997

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	07/05/94	Ecology and Environment, Inc.	U.S. EPA	Geoprobe and Ground- water Assessment Attachment to the Site Assessment	137
2	09/28/94	Karl, R., U.S. EPA	Various Potentially Responsible Parties	Letter re: General Notice of Potential Liability w/Attached Mailing List	28
3	10/31/94	Karl, R., U.S. EPA	Various Potentially Responsible Parties	Letter re: General Notice of Potential Liability w/Attached Mailing List	27
4	02/21/95	Karl, R., U.S. EPA	Various Potentially Responsible Parties	Letter re: General Notice of Potential Liability w/Attached (1) Mailing List and (2) List of PRP's Receiving Previous Notice Letters	30
5	09/01/95	Sherrard, J., Ecology and Environment, Inc.	Faryan, S., U.S. EPA	Memorandum re: Cost Estimate for the CCCI Site (PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED)	8
6	09/08/95	Karl, R., U.S. EPA	Dehais, P.; Toledo Pickling and Steel Service and M. Longchapt; Franco Steel Corporation	Letter re: General Notice of Potential Liability w/Attached List of PRP's Receiving Previous Notice Letters	29

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
7	09/19/95	Karl, R., U.S. EPA	Berger, N., Thor Power Tools	Letter re: General Notice of Potential Liability w/Attached List of PRP's Receiving Previous Notice Letters	30
8	10/13/95	Karl, R., U.S. EPA	Various Potentially Responsible Parties	Letter re: General Notice of Potential Liability w/Attached Mailing List and List of PRPs Receiving Previous Notice Letters	30
9	02/08/96	Muno, W., U.S. EPA	<i>De Minimis</i> Potentially Responsible Parties	Letter re: U.S. EPA <i>Offer of De Minimis</i> Settlement w/Attached (1) Mailing List and (2) Draft Administrative Order on Consent	83
10	02/14/96	Kawakami, C., U.S. EPA	Various Potentially Responsible Parties	Letter re: Notice of <i>De</i> <i>Minimis</i> Settlement Offer w/Attached (1) Major PRP Mailing List and (2) Administrative Order on Consent	55
11	06/12/96	Federal Register	Public	Notice: <i>De Minimis</i> Settlement Under Section 122(g) of CERCLA in the Matter of Conservation Chemical Company of Illinois; Gary, IN	2
12	07/11/96	Helmstetter, C.; Spencer, Fane, Britt & Browne	Kawakami, C.; U.S. EPA	Letter re: Various PRP's Comments on the Proposed <i>De Minimis</i> Settlement w/ Attached (1) List of Companies Submitting Comments and (2) May 2, 1995 Letter from C. Lake (McBride Baker & Coles) Transmitting Initial Comments	6
13	07/12/96	Sargis, M., Mauck Bellande Cheely	Kawakami, C., U.S. EPA	Letter re: K.A. Steel Chemical's Comments on the Proposed <i>De Minimis</i> Settlement w/Attachments	161
14	08/12/96	Kawakami, C., U.S. EPA		Responsiveness Summary re: the <i>De Minimis</i> Settlement	11
15	08/12/96	Muno, W., U.S. EPA		Declaration of William E. Muno re: the <i>De Minimis</i> Settle- ment and Final <i>De Minimis</i> Administrative Order on Consent	2

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16	08/30/96	Kawakami, C., U.S. EPA	Helmstetter, C.; Spencer, Fane, Britt & Browne	Letter Forwarding Attached U.S. EPA's Responsiveness Summary re: the De Minimis Settlement	13
17	08/30/96	Kawakami, C., U.S. EPA	Sargis, M.; Mauck Bellande Cheely	Letter Forwarding Attached U.S. EPA's Responsiveness Summary re: the De Minimis Settlement	13
18	08/30/96	Kawakami, C., U.S. EPA	Settling De Minimis Parties	Letter re: Effective Date of the Final De Minimis Settlement for the CCCI Site w/Attached (1) Mailing List and (2) Final De Minimis Administrative Order on Consent	62
19	12/12/96	Federal Register	Public	Notice: Correction of Typographical Error in Final Settlement Payment Amount for One Settling De Minimis Party and Correction of Final De Minimis Settlement Pay- ment Amounts for Two Settling De Minimis Parties; In the Matter of Conservation Chemical Company of Illinois, Inc.; Gary, IN	1
20	02/04/97	Kawakami, C., U.S. EPA		Revised Appendix D to the Final De Minimis Administrative Order on Consent for the Conser- vation Chemical Company of Illinois, Inc.	3
21	02/04/97	Kawakami, C., U.S. EPA	Henry, P., Appleton Electric Company	Letter re: Final De Minimis Payment for Appleton Electric Now Due	6
22	02/04/97	Kawakami, C., U.S. EPA	Young, J., NL Industries, Inc.	Letter re: Final De Minimis Settlement Pay- ment for Doehler-Jarvis Now Due	6
23	02/04/97	Kawakami, C., U.S. EPA	Gaffney, T., Jones Chemical, Inc.	Letter re: Final De Minimis Settlement Pay- ment for Jones Chemical Now Due	6

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
24	00/00/00	Faryan, S., U.S. EPA	Muno, W., U.S. EPA	Action Memorandum: Determination of Threat to Public Health or Welfare or the Environ- ment at the Conservation Chemical Site (PENDING)	
25	02/07/97	Karl, R., U.S. EPA	Various Potentially Responsible Parties	Letter re: General Notice of Potential Liability and Offer to Negotiate Settlement w/Attached (1) Mailing List, (2) List of PRPs at Site and (3) Draft Administrative Order on Consent	36

**CONSERVATION CHEMICAL COMPANY OF ILLINOIS
GARY, INDIANA**

FINAL REPORT

Prepared in Response to Administrative Order by Consent
Pursuant to Section 106 of the Comprehensive Environmental
Response, Compensation, and Liability Act of 1980, as amended,
42 U.S.C. § 9606(a)

PREPARED BY:

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January 2002

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Basin Waste Analyses, Manifests, and Certificates of Destruction	C
Drum Waste Manifests and Certificates of Destruction	D
Labpack Manifests and Certificates of Destruction	E
Lagoon Sample Location Diagrams and Laboratory Analyses	F
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Data Validation Reports	M
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1.0 INTRODUCTION

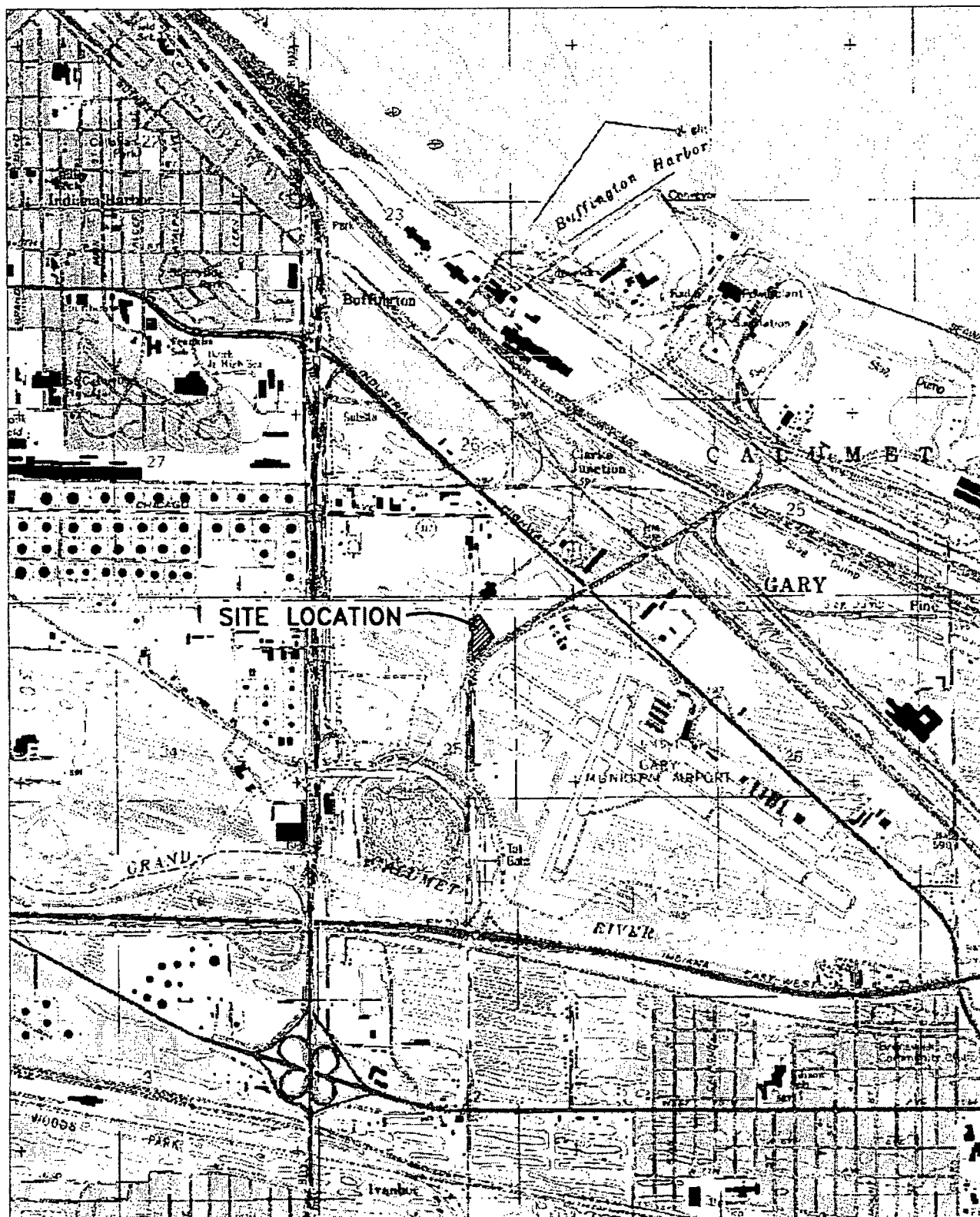
This Final Report was prepared to document the investigative, sampling, and remediation activities performed to comply with Administrative Order, Docket No. VW-98-C-497 (the Order) and Amendment to the Order which were entered into by the United States Environmental Protection Agency (EPA) and the Potentially Responsible Parties (PRP's), known as the 6500 Industrial Highway Group, for the Conservation Chemical Company of Illinois, Inc. (CCCI) site. The CCCI site is located at 6499 Industrial Highway, Lake County, Gary, Indiana. The effective dates of the Order and Amendment were February 4, 1999 and November 29, 2001, respectively.

1.1 Site Description

CCCI site is a 4.1-acre triangular-shaped piece of land in Gary, Indiana. The site is situated north of and adjacent to the Gary/Chicago Airport's main runway, and is bounded by the Western Scrap property to the north and east, the Elgin, Joliet and Eastern (EJ&E) Railroad tracks to the south, and an undeveloped tract of land to the west. See Figure 1-1.

1.2 Work Plan Overview

Initially, a Work Plan was developed on behalf of the PRP's by Krikau, Pyles, Rysiewicz & Associates, Inc. (KPR). This Work Plan, which was dated March, 1999 and was approved by EPA on April 27, 1999, outlined the project activities to be performed to comply with the requirements of the Order. During the implementation of the Work Plan, however, certain modifications to the scope of activities specified in the Work Plan were required and ultimately agreed to by both EPA and the PRP's. A subsequent letter dated April 13, 2000 which documented the initial modifications was prepared and executed. Copies of the Work Plan, approval and subsequent acknowledgment letters, and modification letter are included in Appendix A. Furthermore, as a result of the Amendment to the Order, the requirement of installing a containment barrier was replaced by the installation of a sewer on Gary/Chicago Airport property. This installation, the final remedial activity required, was completed by November 30, 2001. A copy of the Amendment to the Order is also included in Appendix A.



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738 ft Scale: 1" = 75.000' Detail: 15.0' Datum: WGS84

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GENERAL SITE LOCATION MAP

Conservation Chemical Company
6499 Industrial Highway
Gary, Indiana

Scale: 1" = 2500' | Date: January, 2002

KPR Project No. 17094

FIGURE 1-1

1.3 General Description of Activities Performed

In general, the following investigative and remedial activities were performed in response to the Order:

- a. Site access, site security and a field operations office were established.
- b. An inventory of the aboveground drums, tanks, basins, lagoons, and potential asbestos containing materials (ACM) was performed.
- c. Sampling of the contents found in the aboveground drums, tanks, basins, lagoons, and ACM was performed to characterize each material for disposal or treatment.
- d. All scrap metal from tanks, towers, aboveground pipe, and drums, along with any miscellaneous metal found on the site, was cleaned, cut, and removed off-site for recycling.
- e. An extent of contamination study was conducted in the eastern one-third of the site. As a result of the findings, contaminated subsurface soils in certain "hot spot" areas were removed and disposed of off-site.
- f. Additional subsurface areas, as identified by EPA, were investigated for the presence of buried drums. The drums encountered were excavated, profiled for disposal, and properly disposed of off-site.
- g. A treatability study was performed for each of the sludge materials contained in the three (3) lagoons identified on-site. As a result of the study, the contents of each lagoon were stabilized to non-hazardous levels and placed on-site under a clay cap and clean topsoil. The capped areas were ultimately seeded to promote vegetation growth to assist in erosion control.
- h. An inventory of all existing groundwater monitoring wells on-site was performed and all of the wells identified abandoned in accordance with Indiana Department of Environmental Management (IDEM) regulations.
- i. As an alternative to installing a containment barrier along the southeast border, a concrete sewer was installed in the ditch on Gary/Chicago Airport property across the EJ & E railroad tracks which border the southeast perimeter of the CCCI site.
- j. All excavated areas were backfilled with clean fill.
- k. All aboveground structures were demolished and the resulting debris disposed of off-site.

- l. A railroad spur running through the central portion of the CCCI site was dismantled. The rails were sent to a metal recycler and the railroad ties disposed of off-site.
- m. The decontamination pad was removed and the entire CCCI site was leveled.
- n. The security fence surrounding the CCCI site was relocated to within the site's property line and replaced and/or repaired where required.
- o. The field operations office was demobilized.
- p. Custodial responsibility of the site was relinquished to EPA on August 23, 2000.

2.0 ESTABLISHMENT OF SITE CONTROL AND OPERATIONS

On July 1, 1999, KPR assumed the custodial responsibility of the CCCI site from EPA. As such the following activities were implemented:

2.1 Site Control

Access to the site was controlled by re-establishing and enhancing site security. This was accomplished by repairing the existing perimeter fence around the site, providing security guard service to monitor the site on a 24-hour basis, and establishing procedures for authorized access to the site.

2.1.1 Fence

The existing sections of fence were assessed for its integrity, its ability to prevent unauthorized access to the site by persons or ground animals and for its location in relationship to property boundaries. Portions of the existing fence not currently on property lines were relocated so that the fence coincided, as close as practicable, with actual property boundaries. The property lines were verified by the performance of a property survey and were identified by stakes.

Certain sections of the existing fence which were in disrepair were either replaced or refurbished to match the quality of acceptable fence sections. In areas where no fence existed, new sections of fence were installed.

The site entrance was re-established from Industrial Highway, across Western Scrap property, at the east property line of the site. This route was improved, graded, and routinely maintained to allow vehicular access and was demarcated by a newly constructed fence line.

The second or auxiliary gate established was the former entrance located at the northwest property line across property belonging to SES, Inc. and from Route 312. This gate was utilized as an emergency exit during on-site activities and was locked when not in use.

2.1.2 Site Security and Access Procedures

Site security was enhanced by employing a reputable guard service during the implementation of this Work Plan to monitor access to the site on a 24-hour basis. The firm providing this service (A&R Security) was stationed in the guard house during normal business hours and in the field operations office the rest of the time. The guard house was established at the site entrance access road off Industrial Highway. A sign was posted to visually mark the site entrance.

The security firm had the responsibility of assuring that all visitors sign in and their access approved prior to entering the site.

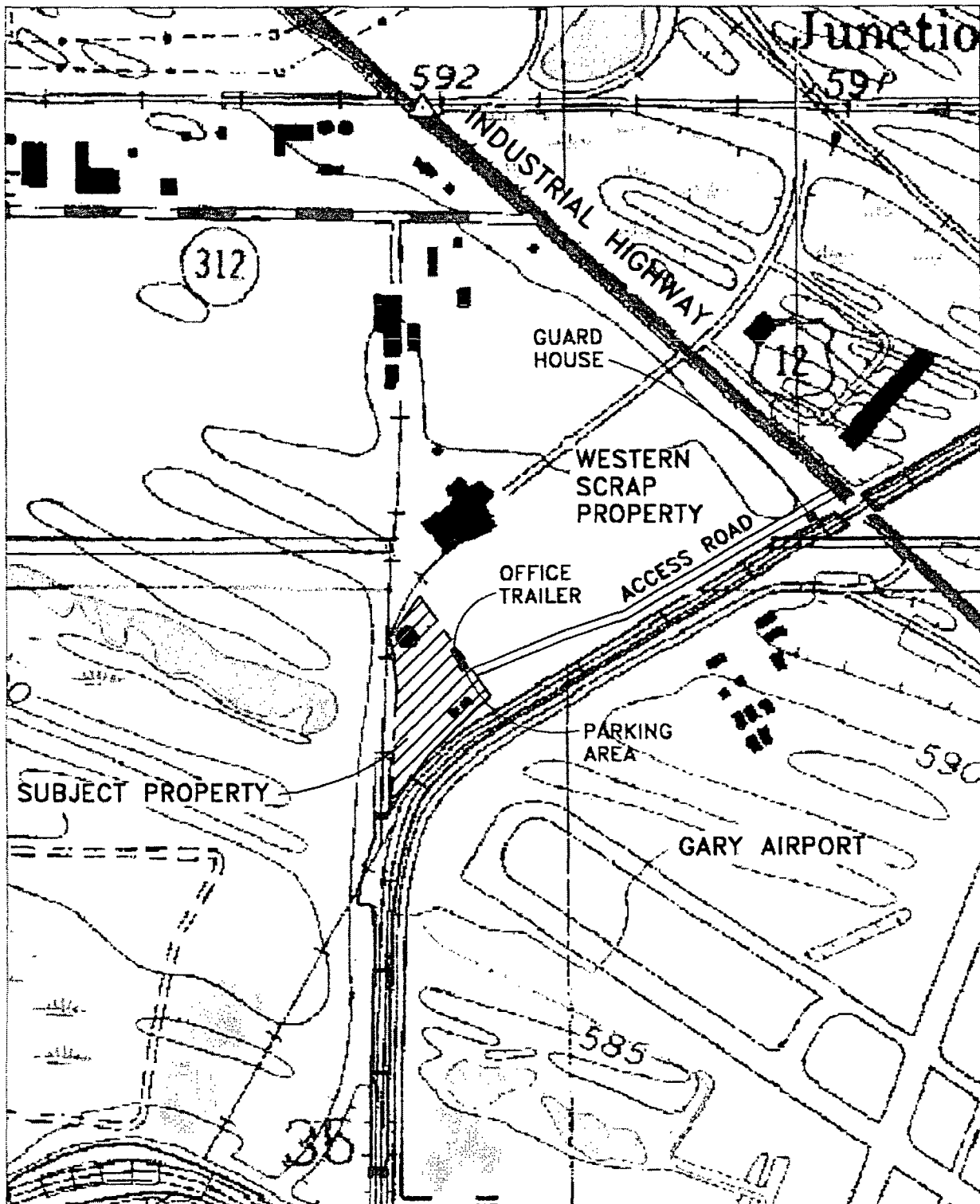
A list of contacts with jurisdiction over the site including the fire department, police department, EPA's OSC and emergency response groups, and other key individuals was provided to the security firm in the case of an emergency and clearly posted within the site field office.

2.1.3 Site Field Operations Office

An office trailer was located near the main entrance to the site.

Electric and phone service were established to the field office. Potable water service at the site was provided in the form of bottled water by a commercial water supplier. Suitable sanitary facilities were provided and routinely serviced by a qualified portable lavatory service contractor.

A designated parking area was established outside the field office. All personnel entering the site were required to park their vehicles in this designated area. No personal vehicles were allowed to enter the site without the permission of EPA or a designated representative of the PRP's. Figure 2-1 depicts the approximate locations of the fence line, office trailer, and designated parking area.



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150 ft Scale 1:6,400 Detail 15-0 Datum WGS84

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GENERAL SITE DIAGRAM

Conservation Chemical Company
6499 Industrial Highway
Gary, Indiana

Scale: see above

Date: January, 2002

KPR Project No. 17094

FIGURE 2-1

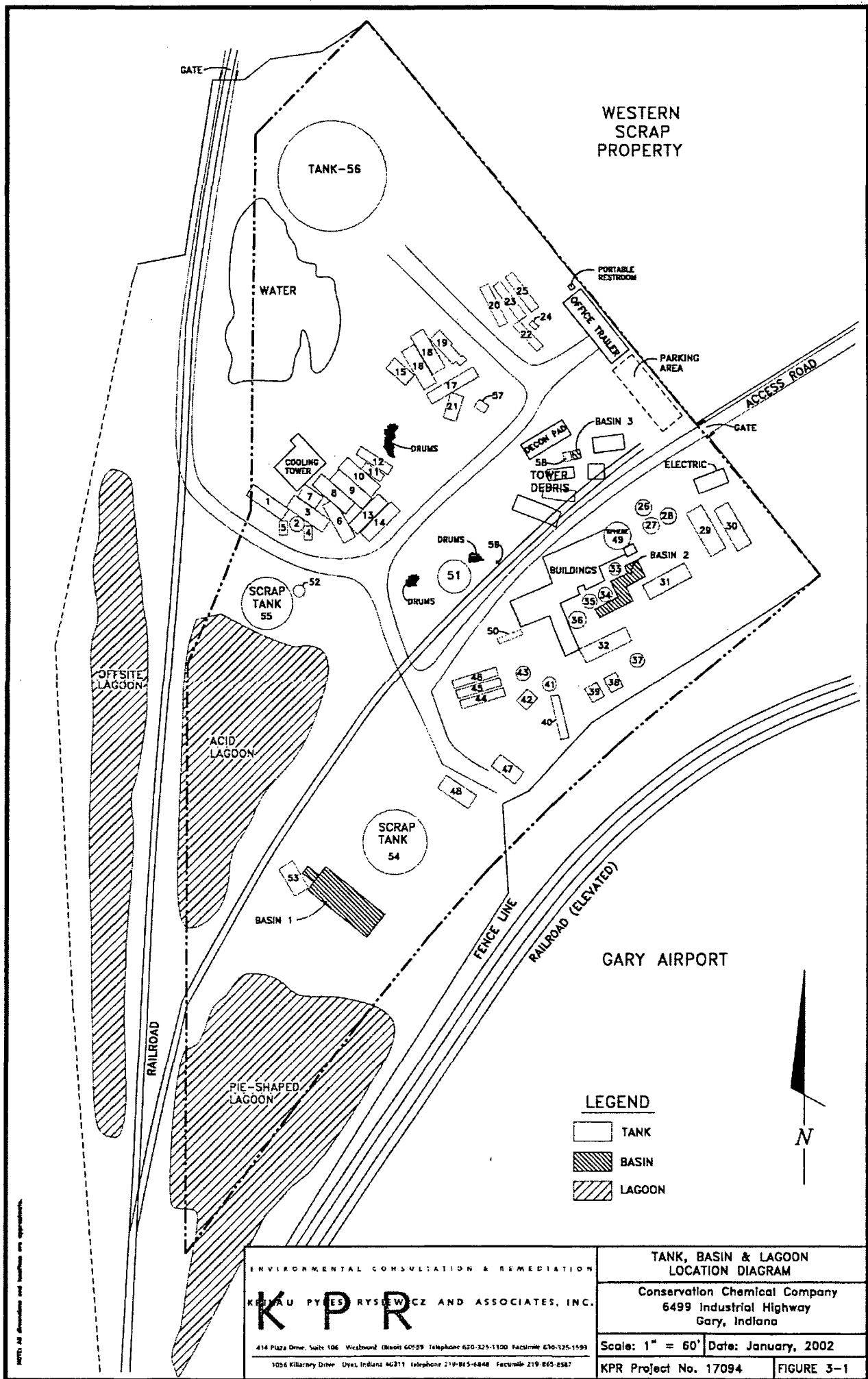
3.0 SITE INVESTIGATION/REMEDATION ACTIVITIES

Present at the site were various sized aboveground storage tanks, three (3) basins, a multitude of drums, labpacks, three (3) lagoons, potential asbestos containing materials, monitoring wells, and aboveground structures. Each one of these items required further inspection and evaluation to determine the presence of hazardous materials. Prior to performing any of the on-site investigative activities, however, all areas that contained potential physical hazards were clearly identified as such through the use of caution tape, barricades or other warning barriers.

Once the materials encountered were identified and properly characterized, they were either removed off-site for appropriate disposal or treated on-site to non-hazardous levels for final disposition on the property. The specific site investigation and remedial activities performed are summarized in the following sections:

3.1 Storage Tanks

All storage tanks on-site were physically inspected to determine their integrity and contents. As a result of the inspection, a total of 59 tanks were identified. The approximate location of each tank on the site is depicted in Figure 3-1. Some of these tanks had been previously cut and cleaned but had accumulated rainwater, while others still contained potentially hazardous materials or were empty. A representative sample of the contents in each previously cleaned storage tank was obtained and analyzed for pH and total cyanide. For tanks with unknown contents, a representative sample from each was obtained for hazcat analyses. If a material was determined to be non-hazardous by the hazcat procedures then a second representative sample was analyzed for pH, total cyanide, TCLP metals, volatile organic compounds (VOC's), semi-volatile organic compounds (SVOC's), and PCB's to verify the non-hazardous classification. Once all the tanks were sampled and the contents properly characterized, the contents were removed from each tank and the tanks cleaned. Ultimately, the tanks were sent off-site to a scrap metal recycler (Bethlehem Steel, Burns Harbor, Indiana or Gaby Iron & Metal, Chicago Heights, Illinois) or if rubber lined to a landfill (Newton County Landfill, Brook, Indiana) for disposal as a non-hazardous waste. Two of the tanks were of fiberglass construction. After cleaning, they were both crushed and the resulting debris sent to a non-hazardous landfill (CID-RDF, Chicago, Illinois). A detailed inventory was developed which identifies each tank encountered on the CCCI site, provides an estimate of the volume or quantity of



NOTES: All dimensions and locations are approximate.

ENVIRONMENTAL CONSULTATION & REMEDIATION	TANK, BASIN & LAGOON LOCATION DIAGRAM	
K P R KRYSEWICZ AND ASSOCIATES, INC.	Conservation Chemical Company 6499 Industrial Highway Gary, Indiana	
414 Plaza Drive, Suite 106 Wichmond, (Mass) 01959 Telephone 617-329-1100 Facsimile 617-325-1593	Scale: 1" = 60'	Date: January, 2002
1036 Kilbuck Drive Dyer, Indiana 46211 Telephone 219-865-6848 Facsimile 219-865-8587	KPR Project No. 17094	FIGURE 3-1

wastes in each tank, and lists the final disposal site for the contents and the tank. A copy of that inventory appears in Appendix B. Copies of the manifests and certificates of destruction documenting the hazardous contents from each tank along with the manifests documenting the non-hazardous contents are also included in Appendix B.

In summary, the total amounts of each category of waste found in the tanks are presented below.

SUMMARY OF TANK WASTES

Hazardous Liquids

Acids	54,305 gallons
Alkalines	35,368 gallons
Caustics	3,865 gallons
Chrome/Cadmium	1,255 gallons

Hazardous Solids

Methylene chloride, n-butanol, etc.	24 cubic yards
Methylene chloride, n-butanol, etc	1,600 gallons*
Ferric chloride	3 cubic yards
Trichloroethylene	25.11 tons
Lead/chlordane	165 gallons*
(*Manifested in gallons although waste was solid in form)	

Non-hazardous Petroleum Contaminated Soil 472.39 tons

Non-hazardous Refractory Brick 29.33 tons

Non-hazardous Oily Solid 385 gallons

Non-hazardous Oil 85 gallons

Non-hazardous Sludge 55 gallons

PCB Liquid 660 gallons

3.2 Basins

Two (2) individual concrete basins containing liquids and sludges were originally identified on the CCCI site. During the performance of the remediation activities, a third basin containing waste materials was encountered. The approximate locations

of the original basins (Basin-1 and Basin-2), along with the additional basin (Basin-3), are identified on Figure 3-1.

Initially, representative samples of the liquids and sludges from each basin were both obtained for hazcat analyses. If the materials were determined to be non-hazardous by the hazcat procedures, as was the case for both the Basin-1 and Basin-2 samples, a second set of samples was analyzed for pH, total cyanide, TCLP metals, VOC's, SVOC's, and PCB's to verify the non-hazardous classification. The second set of samples obtained from Basin-1 and Basin-2 confirmed that both the liquid and sludge contained in Basin-2 and the liquid in Basin-1 were non-hazardous. The sludge from Basin-1, however, was determined to be hazardous. Copies of the analytical reports for the second set of samples are included in Appendix C.

The hazcatting procedures performed on the liquid and sludge contained in Basin-3 determined that those materials were hazardous.

As a result of the waste characterizations performed, it was determined to perform the following remedial activities on each basin:

BASIN-1

- | | |
|----------|---|
| Liquid - | A total of 9,200 gallons of the liquid was pumped and removed from Basin-1. The non-hazardous liquid was disposed of at CID-RDF's biological water treatment facility. |
| Sludge - | The sludge was required to be stabilized by mechanically mixing the material with Omni Material's cement kiln dust. After stabilization was completed, a total of 584.52 tons of hazardous waste solid was disposed of at the EQ's Michigan Disposal Waste Treatment Plant located in Bellville Michigan. |

After all materials had been removed, the basin was cleaned. The cleaning activities resulted in the generation of 680 gallons of hazardous waste liquid. This waste was disposed of at Clean Harbors, Inc. located in Chicago, Illinois (Profile No. CH143756). The basin was subsequently backfilled with imported aggregate material and leveled to grade.

Copies of the manifests and certificates of destruction documenting the disposal of the hazardous solid waste and liquid and the manifests documenting the disposal of the non-hazardous liquid waste are included in Appendix C.

BASIN-2

Since both the liquid and sludge materials found in Basin-2 were determined to be non-hazardous, the materials were left within Basin-2. During the leveling/grading of the site, the basin was filled in with crushed cinder block and imported aggregate stone and leveled to grade.

BASIN-3

Liquid - A total of 3,500 gallons of hazardous liquid was pumped and removed from Basin-3 and disposed of at Clean Harbors/Chicago, Illinois (Profile No. CH144068).

Sludge - The amount of residual sludge that was removed from Basin-3 was not uniquely quantified since it was compatible with and was ultimately combined with the waste contained in Tank No. 51. The total amount of hazardous waste solids removed from Tank No. 51 was 24 cubic yards which was disposed of at Clean Harbors/Kimball, Nebraska.

Copies of the manifest and certificate of destruction documenting the disposal of the liquid hazardous waste are also included in Appendix C.

After all material had been removed, the basin was cleaned. The cleaning activities resulted in the generation of a small volume of hazardous waste liquid. This liquid was also placed into Tank No. 51. After the basin had been cleaned, it became apparent that it was constructed of unlined metal and not concrete as originally thought. Therefore, the cleaned steel basin was excavated, cut and sent off-site to Bethlehem Steel for metal recycling. The resulting excavation was backfilled with imported aggregate material and leveled to grade.

3.3 Drums

3.3.1 Aboveground Drums

A large number of abandoned 55 gallon drums were present aboveground at the

site. The majority of these drums were previously staged by others in designated areas, however, additional drums were discovered during the performance of the on-site remedial activities. A total of 165 drums were ultimately encountered. Some of these drums were empty, a few contained general rubbish, while the majority contained potential hazardous materials. A representative sample was obtained from each drum containing potential hazardous materials for hazcat analysis to assess the viability of bulk loading and subsequent disposal of the wastes. Based on the information resulting from the drum investigation and the hazcat procedures, the drums were segregated into the following categories and waste streams and disposed of as listed.

Category	Total Number of Drums	Amount of Waste	Final Disposition of Wastes
Hazardous Waste Solid* (Tetrachloroethane, xylene)	46	13 cubic yards	Clean Harbors (Profile No. CH144097)
Hazardous Waste Solid* (Toluene, TCE)	67	13 cubic yards	Clean Harbors (Profile No. CH144098)
Hazardous Waste Liquids	38	Unknown	Combined with wastes in Tank No. 51 and disposed of at Clean Harbors
Trash	3	Unknown	CID-RDF Landfill
Empty	11	----	----

* Some of these drums also contained a liquid portion. These liquids were initially drained off and combined with the wastes in Tank No. 51.

After cleaning, the salvageable drums were crushed and sent to Bethlehem Steel as miscellaneous scrap metal for recycling. Copies of the manifest and certificates of destruction documenting the disposal of the hazardous wastes from the drums are included in Appendix D.

3.3.2 Buried Drums

One of the activities outlined to be performed in the Work Plan was a magnetometer study on the eastern one-third of the site to detect any buried drums or tanks in that area. While performing test pit trenches in that area, however, a significant number of underground pipes were encountered. EPA, therefore, agreed to waive the requirement of performing the magnetometer study because of those interferences. Instead of the study, the PRP's were directed to perform a subsurface investigation in other areas of the site. These areas were generally located near Tank Nos. 55 and 56, the vicinity of the former wooden cooling tower, and by the roadway near the decontamination pad. During this investigation, a significant amount of buried drums and containers potentially containing hazardous materials were encountered. The buried drums were excavated and staged on a plastic liner, along with any other orphaned drums encountered during the performance of other subsurface activities such as soil removal or lagoon stabilization. Representative samples of the drummed material were obtained and analyzed to characterize the material. As a result, some of the material was determined to be hazardous. The staged material was ultimately shredded and segregated into either a hazardous or non-hazardous pile. A total of 111.18 tons of non-hazardous shredded drum debris, primarily consisting of empty steel drums, drum lids and rings, and plastic drum liners, was disposed of at the CID-RDF landfill (Profile No. JF027). A total of 60 cubic yards of shredded hazardous waste solid debris was disposed of at EQ's Michigan Recovery Systems disposal site (Approval No. 051600EAC). Copies of the manifests and certificates of destruction documenting the disposal of the hazardous waste materials and the manifests documenting the disposal of the non-hazardous waste materials are also included in Appendix D.

3.4 Labpacks

As a result of prior investigation activities performed by others on the CCCI site, approximately five (5) labpacks containing small quantity containers of hazardous chemicals were present. These labpacks, along with the small quantity of additional hazardous chemicals discovered during the investigation of the property, demolition of structures, and excavation activities, were repackaged as labpack items by Clean Harbors, Inc. A total of 32 fiberglass containers containing variable amounts of waste flammable solids, flammable and corrosive liquids, oxidizing liquids, acids, and paints

were ultimately removed from the site and disposed of at Clean Harbors (Profile No. CH144200). Copies of the manifests and certificates of destruction documenting the disposal of these wastes are included in Appendix E.

3.5 Lagoons

The three (3) lagoon areas subjected to this Order are depicted in Figure 3-1 and are identified as the “pie basin” lagoon, “acid” lagoon, and “off-site” lagoon. Initially, an investigation was conducted to determine whether further stabilization of each lagoon was required. In accordance with the procedures outlined in the Work Plan, a total of eight (8) representative samples from the pie-shaped lagoon, six (6) representative samples from the acid lagoon, and four (4) representative samples from the off-site lagoon were obtained. These samples were each analyzed for total and hexavalent chromium, TCLP metals, and PCB’s. Further stabilization would be deemed necessary if the TCLP chromium level exceeded 5 mg/L, the hexavalent chromium level exceeded 200 ppm, and/or the sludge material in any of the lagoons contained excess water. As a result of the initial characterization sampling performed, it was determined that some of the sludge in the pie-shaped lagoon was hazardous while the sludges in both the acid and off-site lagoons were non-hazardous. None of the sample results indicated the detection of PCB’s (>50 ppm) or any other contaminants of significant concern. However, all the sludge in the acid and off-site lagoons required some stabilization because of the obvious water content.

A treatability study was performed to determine the additional neutralization requirements. The treatability study consisted of combining representative portions of the lagoon samples with varying percentages of several alkaline stabilizing agents. As a result of the study, it was concluded that the mixture of 10% lime kiln dust and 90% sludge would render the sludge non-hazardous and of suitable structural integrity to be left on-site. It should be noted that the entire off-site lagoon and portions of the acid and pie-shaped lagoons were not on the CCCI property. Once all the off-site materials were adequately stabilized, EPA agreed to allow this material to be placed on the CCCI site in the northwest corner near the former location of Tank No. 56, in the vicinity of Basin-1, and also upon the on-site portions of the acid and pie-shaped lagoons.

Utilizing a track hoe, the sludge materials in all three (3) lagoons were mechanically mixed with lime kiln dust supplied by Omni Materials. After stabilization of the materials in each lagoon was apparently complete, representative samples from each lagoon were obtained to document the adequacy of the stabilization. Specifically, four (4) representative samples along with two (2) duplicate samples were obtained from the off-site lagoon for TCLP and hexavalent chromium analyses. Based on these results, it was determined that the sludge in the off-site lagoon had been adequately stabilized since the acceptable levels for TCLP chromium and hexavalent chromium were not exceeded. The stabilized sludge was subsequently loaded into a dump truck, shuttled to the northwest corner of the property and placed in approximately one foot lifts upon a prepared clay surface. The bottom of the off-site lagoon was restored to original grade with a layer of 3 inch rock. The sidewalls of the lagoon were seeded and/or secured with erosion control blankets.

A total of four (4) representative samples along with one (1) duplicate sample were obtained from the acid lagoon to document the adequacy of stabilization. The analytical results for TCLP and hexavalent chromium were also well below the acceptable levels for each analyte. The stabilized sludge in the off-site portion of the acid lagoon was transferred and placed in one foot lifts on the stabilized portion of the acid lagoon on the CCCI property. The bottom of the off-site portion of the acid lagoon was lined with a layer of 3 inch rock. The sidewalls of this portion were seeded and/or secured with erosion control blankets.

The pie-shaped lagoon, which contained hazardous material, required several iterations of stabilization and subsequent additions of both fly ash and ferric chloride in some areas to ultimately demonstrate acceptable concentration levels. However, when the specified levels were achieved in each of the ten (10) subdivided areas of the lagoon, the off-site portions were placed on the CCCI property either near Basin-1 or on the stabilized on-site portions of the acid and pie-shaped lagoons. The off-site portion was backfilled to original grade with 3 inch rock to promote drainage and to support the EJ & E railroad embankment.

The analytical results of the final documentary samples obtained for each lagoon are tabulated below:

Lagoon	Sample I.D.	TCLP Chromium Concentration (mg/L)	Hexavalent Chromium Concentration (mg/kg)
Off-site	5-1	0.350	27
	5-1D	0.344	<15
	6-1	<0.040	<15
	7-1	0.417	<15
	7-1D	0.393	21
	8-1	0.908	15
Acid	9-1	0.602	19
	10-1	0.076	22
	10-1D	0.166	30
	11-1	0.233	27
	12-1	0.290	<15
Pie-shaped	13-1	>5.0	<1.4
	13-4*	4.32	<14
	13-6	3.77	<14
	13-6D	3.42	<14
	14-1	>5.0	34
	14-4	4.76	118
	14-4D	4.76	123
	15-1	>5.0	36
	15-3	3.56	—
	15-3D	3.39	—
	16-1	>5.0	<1.4
	16-4	3.99	<14
	16-4D	3.93	23.3
	17-1	>5.0	<1.4
	17-1D	3.6	<1.4
	17-4	3.80	<14
	17-4D	3.42	17
	18-1	2.5	<1.4
	19-1	4.23	<1.4
	20-1	0.20	<1.4
	21-1	0.093	<1.4
	22-1	0.28	<1.3

*During the lagoon documentation sampling, EPA periodically split samples and conducted their own independent analysis. Since the EPA split sample for 13-4 was >5.0, this sample was deemed not acceptable.

The stabilized sludge from all lagoons was capped with at least two feet of clay and 3 inches of topsoil. The capped areas were subsequently seeded to promote vegetation growth that would inhibit erosion and assist in keeping the clay surface intact.

Diagrams depicting the approximate sampling locations in each lagoon with the corresponding analytical results for both initial characterization and final documentary closure are included in Appendix F.

3.6 Asbestos Containing Material (ACM)

An ACM assessment was initially performed at the site to identify all potential ACM on the property since potential ACM in the forms of piping/equipment insulation, building materials, and tank coatings was observed. Fourteen (14) potential ACM materials in various locations were ultimately sampled and analyzed for asbestos content. A copy of the analytical report documenting the analyses is included in Appendix G. A tabulated summary of the representative samples obtained and whether or not the particular material tested was ACM is presented below:

Location/Material	ACM Determination
Tank No. 3/Exterior Coating	Yes
Tank No. 11/Insulation	Yes
Tank No. 8/Exterior Coating	Yes
Tank No. 18/Exterior Coating	Yes
Cooling Tower Panels	Yes
Tank No. 26/Exterior Coating	Yes
Tank No. 27/Exterior Coating	Yes
Tank No. 28/Exterior Coating	Yes
Tank No. 33/Exterior Coating	Yes
Transite Wall Panels	Yes
Tank No. 38/Brick Liner	No
Tank No. 39/Brick Liner	No
Cyanide Tower Insulation	Yes
Tank No. 14/Exterior Coating	Yes

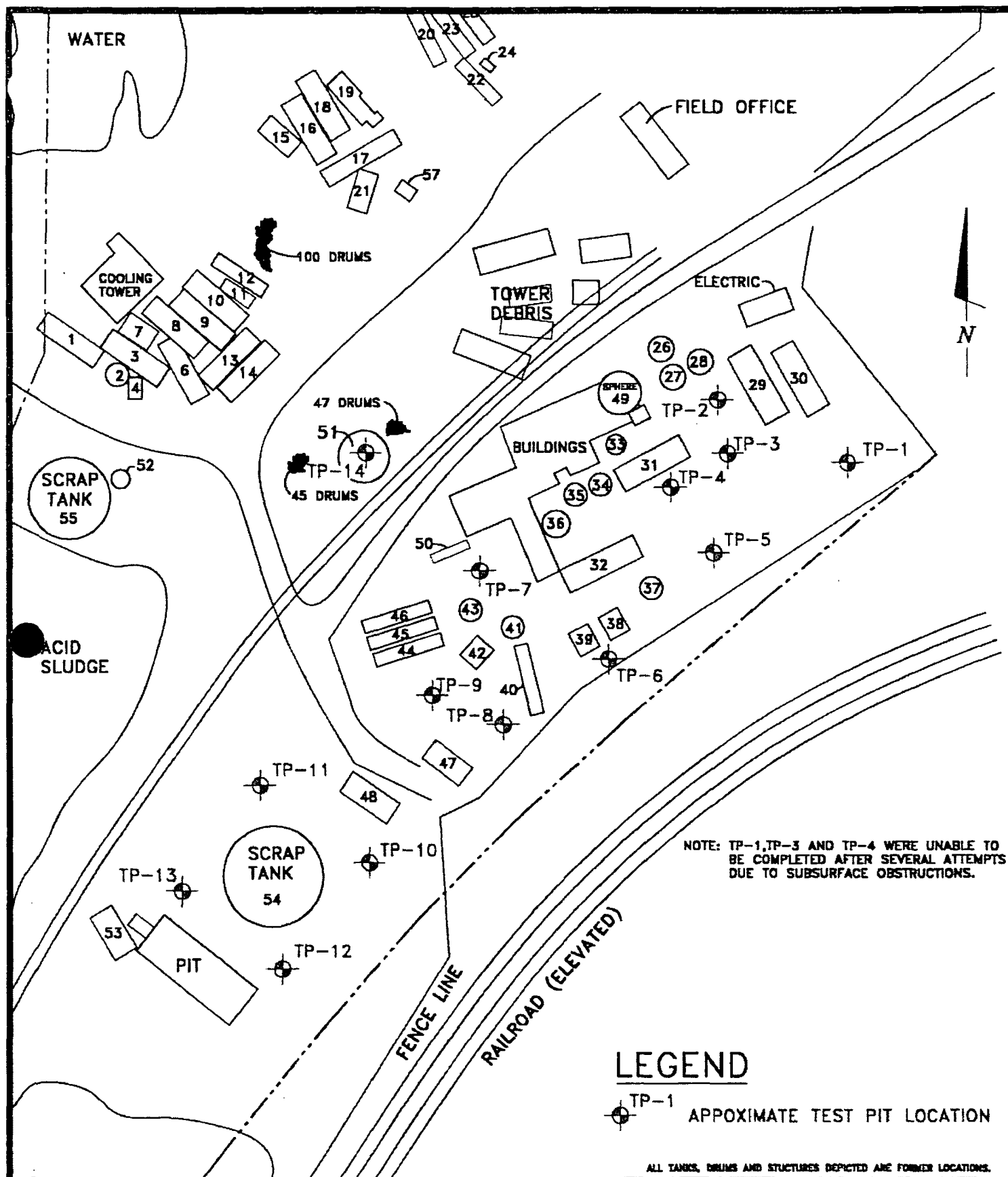
Based on the results of the ACM investigation, all materials verified to be ACM were removed by a licensed contractor after proper notifications were made, as required, to IDEM. Copies of the notifications are included in Appendix G.

All ACM removal was performed prior to the dismantlement or demolition of the aboveground structure or tank having ACM. A total of 275 bags (estimated to be approximately 30 cubic yards) was accumulated in a secured container during the abatement effort and was ultimately disposed of at the Newton County Landfill located in Brook, Indiana. A copy of the waste profile sheet, approval letter, and manifest documenting the disposal are also included in Appendix G.

3.7 Extent of Contamination

Originally, an investigation to determine the extent of residual contamination in the surface and subsurface soils was to be performed on the eastern one-third of the site and in selected "hot spot" areas in the tank and drum storage areas. This investigation was to be performed by advancing a total of fourteen (14) soil borings. However, EPA and the PRP's instead agreed to perform the investigation by excavating fourteen (14) test pits, each to a depth of 7 feet, at the originally proposed locations of the soil borings. While excavating, numerous underground impediments were encountered such as old building foundations and underground pipes which were believed to be remnants of the Berry Oil Refinery Co. operation, the occupant of the property prior to CCCI. These impediments prevented the excavation of test pits at three (3) locations. At the other eleven (11) locations, however, a representative sample of the most contaminated area, based on field observations, was obtained from each test pit. These samples were each analyzed for PCB's, total cyanide, TCLP metals, TCLP VOC's and TCLP SVOC's. The locations of the samples are depicted in Figure 3-2. The results of the analytical results indicated hazardous concentrations of trichloroethene at TP-12 (near Basin-1) and TP-14 (near Tank No. 51) and of lead at TP-5. Because the lead result at TP-5 was believed to be an anomaly, this location was resampled again for lead. Since the second sample at TP-5 did not confirm the presence of a hazardous level of lead, lead was no longer considered an issue at this location. A summary of the analytical results obtained along with the supporting analytical reports are included in Appendix H.

At the request of EPA, the PRP's agreed to excavate and properly dispose of a limited amount of soil near Basin-1 and from beneath Tank No. 51. As a result, a total of



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TEST PIT LOCATION DIAGRAM

Conservation Chemical Company
6499 Industrial Highway
Gary, Indiana

Scale: 1" = 60'

Date: January, 2002

KPR Project No. 17094

FIGURE 3-2

152.82 tons of hazardous waste soil were excavated and disposed of at EQ's Michigan Disposal Waste Treatment Plant (Approval No. 021600MJ). Copies of the manifests and certificates of destruction documenting the disposal of this waste are included in Appendix H. The resulting excavations were backfilled to grade with imported aggregate material.

Also at the request of EPA, the PRP's agreed to perform surficial and subsurface sampling beneath and in the vicinity of the former wooden cooling tower. A total of ten (10) composite samples were obtained from the areas depicted in Figure 3-3. Five of the samples were obtained from the surface while the remaining five samples were obtained from a depth of 3 feet. An additional surficial soil sample was obtained near the vicinity of Tank Nos. 26, 27, and 28 and one north of Basin-1. All of the samples obtained were analyzed for total, TCLP and hexavalent chromium. The results of the analyses indicated that no hazardous levels of either chromium or hexavalent chromium were detected and, therefore, the material in each area was allowed to be left in place. A copy of the laboratory report documenting the analytical results is included in Appendix I.

3.8 Groundwater Monitoring Wells

A site investigation and a review of pertinent records were performed to identify and locate the groundwater monitoring wells present at the site. A total of ten (10) wells were identified. The approximate location of each well is depicted in Figure 3-4. Each well was closed utilizing applicable methods prescribed and defined by the Indiana Department of Public Health and in accordance with IDEM regulations (310IAC 16-10-2). The closure method utilized over-drilling and included sealing each well with an impervious bentonite/cement mixture that was placed using the tremie-pipe method, removal of aboveground monitoring well appurtenances, and the completion and submittal of Indiana State Form No. 35680 to document the proper closure of each well. Copies of the forms filed with the Indiana Department of Natural Resources are included in Appendix J.

3.9 Containment Barrier/Sewer Pipe

One of the original requirements in the Order was to install a containment barrier along the southeast border of the site to control petroleum migration off-site. While performing test pit excavations in that area, numerous underground pipes and

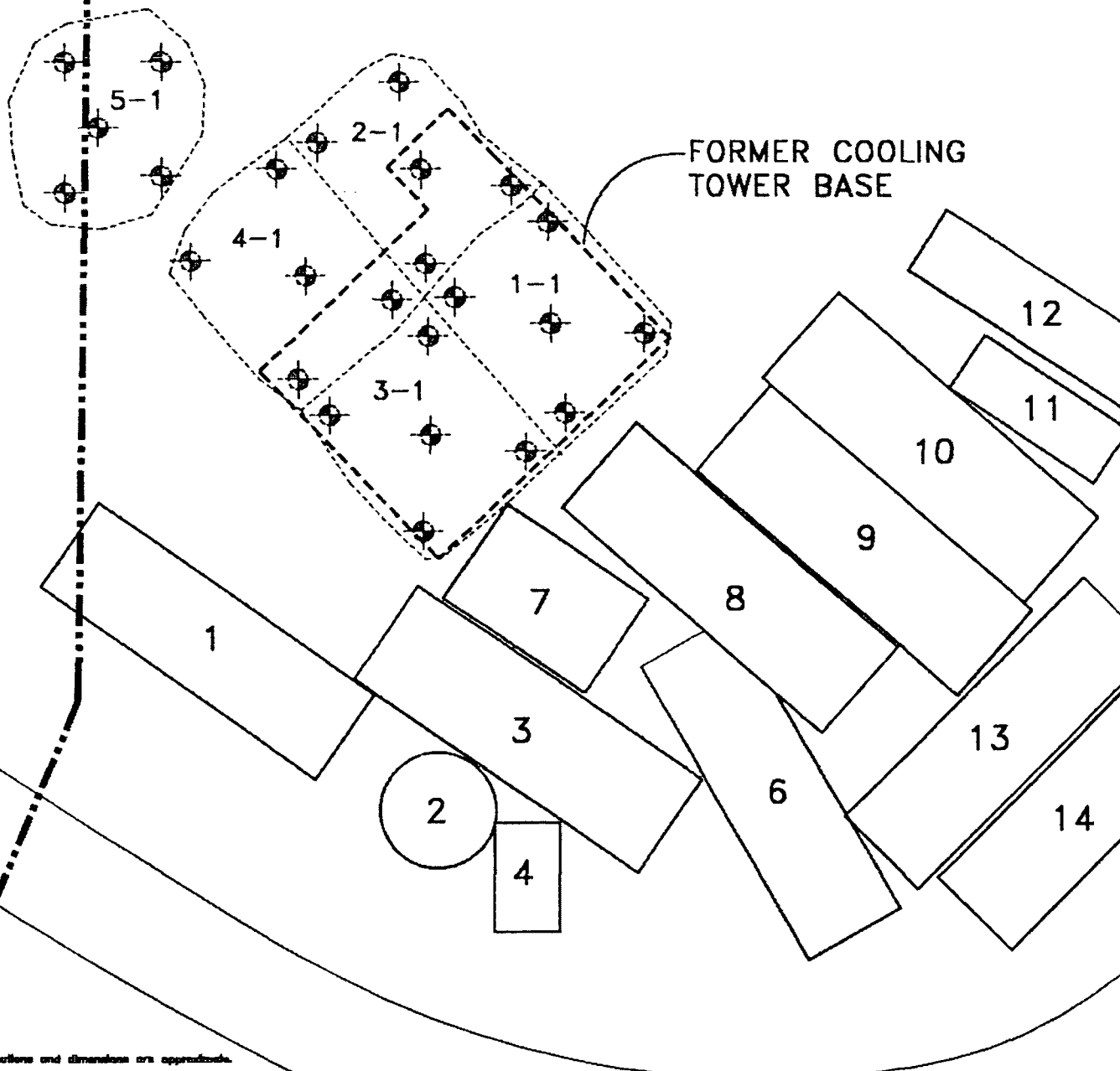
LEGEND



INDICATES SAMPLE LOCATION

(5 SAMPLE LOCATIONS WERE COLLECTED FROM EACH AREA AND COMPOSITED FOR LABORATORY ANALYSIS.)

N



All locations and dimensions are approximate.

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R
KRIMAU PYRES RYSIEWICZ AND ASSOCIATES, INC.

414 Plaza Drive, Suite 106 Westmont Illinois 60559 Telephone 630-325-1300 Facsimile 630-925-1593

1056 Killarney Drive Dyer, Indiana 46211 Telephone 219-865-6848 Facsimile 219-865-8587

WOODEN COOLING TOWER SAMPLE LOCATION DIAGRAM

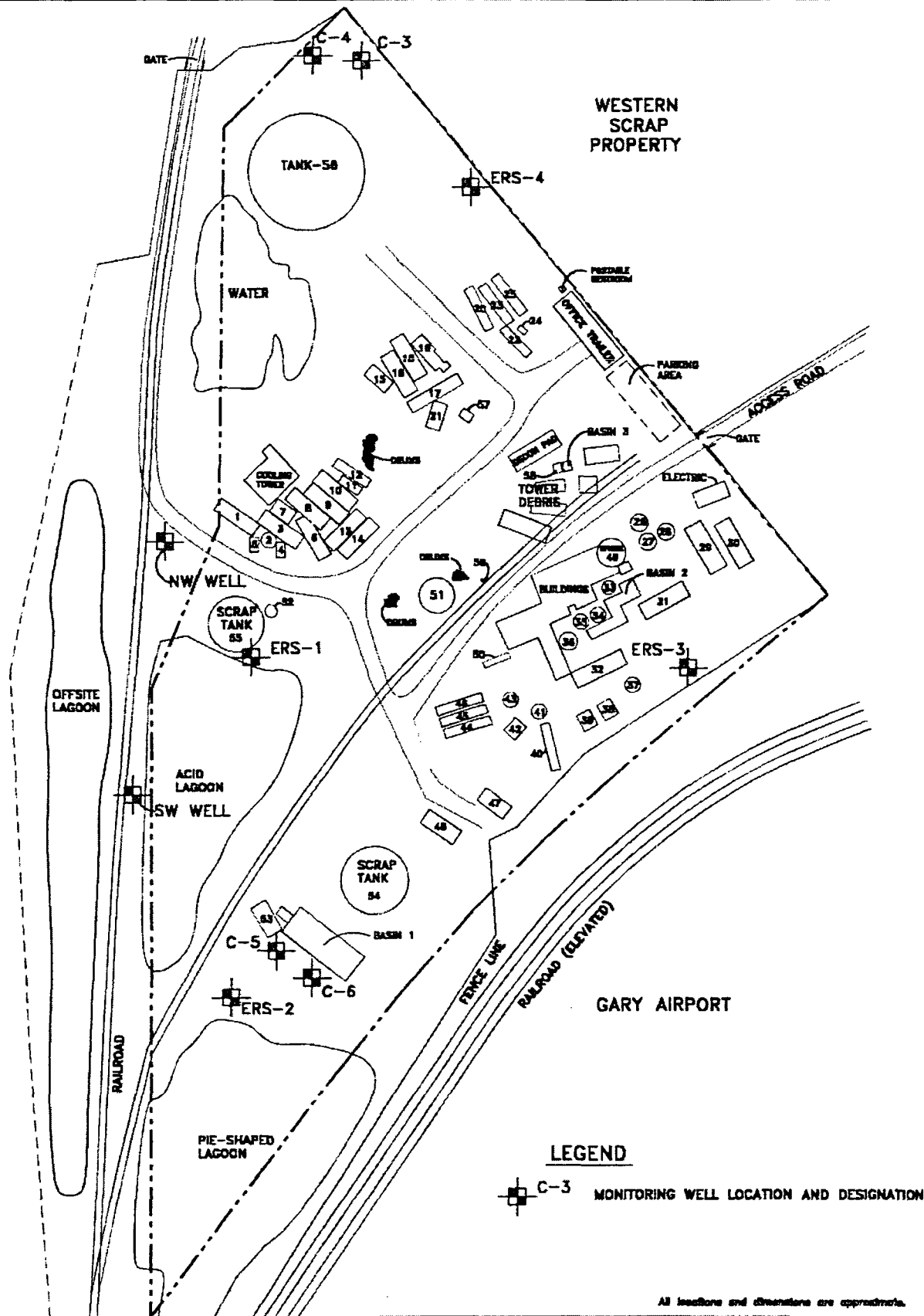
Conservation Chemical Company
6499 Industrial Highway
Gary, Indiana

Scale: 1" = 10'

Date: January, 2002

KPR Project No. 17094

FIGURE 3-3



ENVIRONMENTAL CONSULTATION & REMEDIATION

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MONITORING WELL LOCATION DIAGRAM

Conservation Chemical Company
6499 Industrial Highway
Gary, Indiana

Scale: 1" = 100' Date: January, 2002

KPR Project No. 17094

FIGURE 3-4

subsurface foundations were encountered. It was jointly determined between EPA and the PRP's that the proposed installation was no longer feasible. An alternate strategy was developed to reduce the potential for petroleum migration to the Gary/Chicago Airport property located directly across the EJ & E railroad tracks. This strategy, which negated the need for the containment barrier, included the installation of a drainage pipe in a ditch at the north end of the runway on airport property. The main section of the pipe, totaling approximately 1,120 linear feet, was constructed using 36-inch diameter concrete pipe. Three (3) 24 linear feet long tributaries using smaller diameter concrete pipe (24-inch and 18-inch) were installed to connect at new manholes in identified drainage areas. In addition, six (6) clay checks were constructed at approximately 200 foot intervals along the main section of the pipe to control petroleum migration. A test port was installed upstream of each clay check to monitor for the presence of oil and to allow for the pumping and removal of any oil that may be encountered. The installation was designed by the Gary/Chicago Airport's Engineer (Ken Ross) to assure that construction was in accordance with Federal Aviation Administration (FAA) requirements. A diagram depicting the sewer installation along with the formal certification signed by Ken Ross that all applicable FAA construction requirements were met are included in Appendix K. This work was completed by November 30, 2001 and marked the completion of the remedial activities of this Work Plan.

3.10 Miscellaneous Material, Waste and Debris Removal

Included in the remedial activities performed at the CCCI site were the following activities:

- Demolition and removal of the wooden cooling tower, several buildings, tank supports, overhead piping, a wooden flatbed truck trailer, and a tractor.
- Excavation and removal of the railroad spur running approximately through the center of the CCCI site.
- Removal of non-hazardous debris and trash.
- Removal of salvageable scrap metal.
- After all field activities on the CCCI site were completed, cleaning and removal of the decontamination pad.

As a result of these activities, the following amounts of materials were removed from the site:

- Construction and demolition debris/trash 215 cubic yards to CID-RDF
 139.56 tons to CID-RDF
 92.4 tons to Newton County Landfill
- Rubber lined scrap steel 258.96 tons to Newton County Landfill
- Railroad ties 63.25 tons to Newton County Landfill
- Tractor motor oils 85 gallons to Clean Harbors, Inc.
 Spring Grove Resource Recovery
 Cincinnati, Ohio
 (Profile No. CH144198)
- Scrap metal for recycling 427 net tons to Bethlehem Steel
 3.05 net tons to Gaby Iron & Metal
- Concrete for recycling 4 truckloads to Bob Heine, Inc.
 (Gary, Indiana)
- Discarded tires Approximately 100-125 tires
 found on-site were quartered and
 sent either with the shredded drum
 wastes to CID-RDF, the Basin-1
 solids to EQ's Michigan Recovery
 Systems, or to Newton County
 Landfill

3.11 Documentary Photographs

Copies of pertinent photographs documenting significant observations, activities performed or on-site conditions are included as Appendix L.

4.0 SAMPLING AND ANALYSIS PLAN

The Sampling and Analysis Plan described within the Work Plan was utilized to define the sampling and data gathering methods implemented during the site investigation and remedial activities. This plan also identified the physical and chemical analyses that were performed.

4.1 Sampling Objective

The primary data uses of the various samples obtained at the site during the implementation of the Work Plan were for site investigation, source characterization, hazard determination, disposal profiling, and treatment effectiveness.

4.2 Sampling Procedures

In accordance with the Work Plan or EPA directives, sampling of various tanks, containers, materials, and a variety of medias such as air, liquid, solid and sludge were undertaken. The sampling was performed in accordance with EPA-approved methodologies utilizing clean sample containers provided by the approved laboratory (TestAmerica, Bartlett, Illinois) and required sampling equipment, including but not limited to bailers, buckets, stainless steel spoons, track hoes, pumps, knives, etc. To reduce the potential for cross contamination, each sample was obtained with either disposable sampling equipment or equipment that had been properly decontaminated beforehand. All wastes generated on-site during sampling activities and sampling equipment decontamination were properly containerized, sampled for characterization determination, and managed in accordance with applicable regulations. All samplers wore the requisite personal protective equipment (PPE) during each sampling episode. Appropriate notification was made to EPA, as required by the Order, in advance of any sample collection activity.

4.3 Sample Designation

The sample identification system developed and utilized for this project included the following sequential information:

- Name of site - CCCI site (CCCI)
- Sample source - Tank (T), Drum (D), Basin (B), Labpack (L), Lagoon Sludge (LS), Test Pit (TP), Cooling Tower (CT)

- Source description - Identification number assigned to each sample source
- Sample number - Sequential number to distinguish multiple samples obtained from each specific source
- QA/QC modifiers - Duplicate (D), Trip Blank (TB)

All field samples were identified with sample identification labels that included the above sample identification and the following additional information:

- Name of sample collector;
- Affiliation of collector;
- Date and time of collection; and
- Analysis request

A chain-of-custody record was completed and accompanied each shipment of sample(s) to the laboratory.

5.0 QUALITY ASSURANCE PLAN (QAP)

A detailed QAP was presented with the Work Plan. The Data Quality and Quality Assurance Objectives outlined within that QAP were intended to ensure that the data collected were sufficient and were of adequate quality for their intended use at the CCCI site. The primary data uses were for source characterization, hazard classification (hazcatting), disposal profiling and evaluation of remedial treatment activities, as well as for health and safety measures.

5.1 Level of QC Effort

Since the laboratory analyses were performed in accordance with EPA procedures and methodology, it is believed that the requisite level of Quality Assurance (QA) and Quality Control (QC) were met.

Data comparability was demonstrated by obtaining duplicate samples. The guideline followed for replicate sampling was to include one (1) duplicate sample for each group of at least five (5) but not greater than twenty (20) samples for all matrices. In some instances, however, a duplicate sample was obtained even when the sample quantity was less than five (5). A trip blank was included with the initial shipment of VOC samples obtained during the test pit sampling, however, no documentary closure sampling for VOC's was either required or performed during the implementation of the Work Plan remedial activities. It should be noted that the specified QA/QC sampling was also not required for waste characterization or classification, treatability testing or disposal profiling. It should also be noted that during certain sampling episodes, data comparability was also verified by EPA through split sampling.

5.2 Data Validation

The selected laboratory utilized for this project (TestAmerica) performed in-house analytical data reduction and validation under the direction of the respective laboratory QA supervisor. The laboratory review included checks for the attainment of QC criteria as outlined in applicable EPA procedures and methods. The validity of analytical data was also assessed by comparing the analytical results of duplicate samples.

Additionally, the laboratory critiqued their own analytical programs by using spiked additional recoveries, established detection limits, precision and accuracy control charts and by keeping accurate records of the calibration of instruments.

Corrective action, if it was determined to be required by audit results or detection of unacceptable data included, but was not limited to, the following:

- Accepting data with an acknowledged level of uncertainty.
- Eliminating outliers identified by the validation task.
- Re-analyzing samples if holding time criteria was not exceeded.
- Re-sampling and analyzing site areas in question.
- Evaluating and amending sampling and analytical procedures.

In addition, the data obtained for documentary samples was further scrutinized by an independent third party data validation firm, Environmental Science and Engineering, Inc. (ESE) located in St. Louis, Missouri. ESE was routinely requested to review and critique the analytical reports prepared by TestAmerica for documentary closure sampling performed at the CCCI site. Copies of ESE's reviews were provided to EPA during the course of this project and are hereby included in Appendix M of this report.

When concerns or questions regarding analytical data were raised by ESE, every reasonable effort was undertaken to provide a suitable explanation that would clarify a misconception or rectify the anomaly. Obviously, however, some sampling and subsequent analysis could not be reproduced because of the dynamic nature of the ongoing remedial activities at the CCCI site.

In summary, it was concluded that the pertinent analytical data obtained included within this report was of sufficient quality to successfully validate and substantiate the integrity of the analytical results obtained within the scope of the Work Plan.

6.0 HEALTH AND SAFETY

6.1 Objective Statement

The health and safety of each Company's and/or Agency's workers, contractors, and visitors at the CCCI site were of the highest priority. It was the policy of the PRP's, the Project Safety Officer (PSO), and the OSC to provide a safe and healthful work place for each Company's and/or Agency's workers, contractors, and visitors through the establishment of safety rules, procedures, and programs that were strictly and uniformly enforced. As a result, each Company's and/or Agency's workers, contractors, and visitors complied with the applicable federal, state, and local safety standards, codes, and regulations throughout the duration of the CCCI project.

6.2 Responsibilities

6.2.1 Project Safety Coordinator

The PSO, or designated backup PSO, was responsible for the daily supervision of all health, safety, decontamination, and monitoring activities associated with each phase of the CCCI project. The PSO was responsible for informing and training contractors and their employees in the specific hazards, work methods, emergency procedures, and personal protective equipment that were required during their work.

As part of this responsibility, the PSO was also responsible for enforcing the provisions of the Health and Safety Plan developed within the Work Plan and site specific safety rules and procedures. The PSO was provided with the authority to stop work activities deemed to be unsafe or dangerous. The PSO worked closely with the OSC to assure that operations were performed in a safe and efficient manner.

6.2.2 Contractors

Contractors were responsible for complying with the requirements of the Health and Safety Plan and for following the specific instructions of the PSO. The contractor's on-site supervisor ensured that his employees followed all applicable rules and procedures identified in the Health and Safety Plan and by the PSO.

6.2.3 Site Workers

All persons working at the CCCI project were required to comply with the requirements of the Health and Safety Plan and the instructions provided by the PSO. Regarding safety consideration, site workers were responsible for:

- Only performing jobs for which they had specific training
- Following prescribed safety rules and regulations
- Using required personal protective equipment
- Reporting all unsafe conditions/work practices that they were aware of
- Reporting all injuries to their supervisor, no matter how minor

6.3 Project Hazard Identification & Protection

Many chemical and physical hazards were present at the CCCI site. Those specifically identified during the implementation of the Work Plan included the presence of hazardous/toxic chemicals and materials, such as acids, caustics, cyanide, organic solvents, asbestos, chrome and other RCRA metals, and PCB's, in solid, liquid, and/or gaseous forms.

A variety of physical hazards were also present. These hazards were treated to be as potentially dangerous as the chemical hazards and included, fall hazards, electrical hazards, excavation related hazards, confined space hazards, heavy equipment related hazards, demolition hazards, noise, and temperature extremes.

6.4 Project Safety Procedures

Site specific procedures were developed to minimize the exposure to adverse impacts from the chemical and physical hazards present at the site. To that end, the following general safety rules were strictly adhered to:

- All persons entering the site were required to register with the on-site security firm.
- All persons granted access to the site were required to read the site Health and Safety Plan and certify that they understood and would comply with its requirements.

- All persons entering the site were required to comply with the requirements in the Health and Safety Plan and the instructions provided by the PSO, OSC, or representatives of the PRP's.
- All persons that entered or worked at the site were made familiar with the location and use of all emergency equipment including fire extinguishers and first aid equipment.
- Persons were required to wear the appropriate respiratory protection and other personal protective equipment while performing tasks at the site.
- All persons that entered or worked at the site made every reasonable effort to avoid contact with potentially hazardous substances unless adequately protected.
- The consumption of food or beverages by any person was strictly prohibited when inside of the exclusion or contamination reduction zones.
- Smoking, matches, lighters, and any other spark or flame producing activity were strictly prohibited within the exclusion or contamination reduction zones.
- Personnel worked in pairs when work required the use of respiratory protective equipment, when any excavation or aboveground structure was entered or while working near or above any pit, lagoon, or liquid containing structure.
- All persons that exited the exclusion and contamination reduction zones were required to wash face and hands immediately.
- Protective equipment such as respirators, boots, gloves, non-disposable clothing were decontaminated or disposed of properly before being removed from the exclusion or contamination reduction zones.

Site and work zone control was created and implemented by maintaining and repairing, as needed, the perimeter fence around the entire site, implementing 24-hour site security, and by establishing exclusion, contamination reduction, and support zones as required. These steps helped to prevent unauthorized access onto the site and

minimized or eliminated the transfer of hazardous substances onto the “clean” area of the property.

Visitors and workers were prohibited from entering the exclusion or contamination reduction zones unless the proper protective clothing and respiratory protection was worn.

Additional measures were undertaken at the site to protect workers and enhance site safety by implementing an air monitoring program. The program consisted of initial screening of areas and workers, perimeter and worker exposure monitoring during significant field activities, and atmospheric monitoring for confined space environments. The air monitoring program helped to assure that worker exposure to unsafe environments without the appropriate personal protective equipment was eliminated, helped to identify the necessary health and safety equipment for performing each task, and ascertained if certain work tasks caused any negative impact on the ambient environment. As a direct result of the monitoring, unprotected worker exposure to unsafe environments was eliminated.

Decontamination procedures to both workers and personal protective, sampling, and heavy equipment were implemented and strictly enforced. An overhead shower alongside the formally constructed decontamination pad was routinely utilized to prevent the transfer of contaminants from contaminated to uncontaminated zones. All contaminated disposable equipment and contaminated wash waters resulting from the decontamination of non-disposable equipment were ultimately managed in accordance with applicable regulations.

6.5 Auditing the Effectiveness of the Site Health and Safety Plan

Safety audits were conducted both periodically and prior to the commencement of major activities at the site to assure the effectiveness of the CCCI Site Health and Safety Plan. These audits were designed to determine compliance with the requirements of the Health and Safety Plan along with commonly accepted safety practices. The audits were performed by both the PSO and by an experienced independent health and safety consultant. As a result of the audits, only minor inadequacies were identified and those were promptly corrected. In addition, not one significant injury or adverse health effect occurred during the performance of investigative or remedial activities on the CCCI site.

7.0 MONTHLY REPORTS

As required by the Order, written progress reports were submitted to EPA on a monthly basis. Each report described the significant developments during the preceding period, including the work performed and any problems encountered, analytical data received during the reporting period, and developments anticipated during the next report period, including a schedule of work to be performed, anticipated problems, and planned resolutions of past or anticipated problems. The initial report was prepared for the month of June, 1999 and subsequent reports were written through the month of December, 2001. Copies of all of the reports prepared to date are included in Appendix N.

8.0 PROJECT COSTS

The total cost incurred as of December 31, 2001 to implement the activities outlined within the Work Plan and those modified activities subsequently agreed to by EPA and the PRP's amounted to \$2,149,542. Table 8-1 is a detailed project cost summary table, which provides the individual task expenditures on a monthly basis.

TABLE 8-1

CONSERVATION CHEMICAL COMPANY OF ILLINOIS

Costs as of December 31, 2001

Task No.	Task Description	Budgeted Amount	Invoice Period & Amount Invoiced																			
			Jun 99	Jul 99	Aug 99	Sept. 99	Oct. 99	Nov. 99	Dec. 99	Jan. 2000	Feb. 2000	Mar. 2000	Apr. 2000	May 2000	Jun. 2000	July. 2000	Aug. 2000	Sept. 2000	Oct. 2000	Nov. 2000	Dec. 2000	
1	General Site Operations	\$750,000	\$12,846	\$42,092	\$47,714	\$38,181	\$39,037	\$43,281	\$16,453	\$34,417	\$30,133	\$41,686	\$38,200	\$60,881	\$36,850	\$27,492	\$10,231	\$6,048	\$1,388	\$4,885	\$1,634	
2	Site Security	\$170,000	\$0	\$5,709	\$12,600	\$7,538	\$12,082	\$8,674	\$8,953	\$13,541	\$9,660	\$12,075	\$9,860	\$7,246	\$14,783	\$9,953	\$0	\$0	\$0	\$0	\$0	
3	Mobilization	\$10,600	\$6,894	\$2,045	\$1,632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4	Site Survey	\$2,600	\$0	\$2,591	\$0	\$0	\$0	\$0	\$906	\$0	\$0	\$0	\$0	\$0	\$0	\$722	\$0	\$0	\$0	\$0	\$0	
5	Trash Disposal	\$81,000	\$0	\$28,890	\$2,342	\$3,992	\$7,917	\$3,508	\$1,314	\$0	\$0	\$845	\$0	\$0	\$125	\$0	\$0	\$0	\$0	\$0	\$0	
6	Air Monitoring	\$15,000	\$0	\$4,860	\$1,458	\$0	\$0	\$0	\$0	\$500	\$0	\$1,050	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
7	Previously Cleaned Tanks	\$32,000	\$3,728	\$12,791	\$15,495	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
8	Tanks & Basins with Wastes	\$450,000	\$5,593	\$21,838	\$90,550	\$48,557	\$41,216	\$8,819	\$48,462	\$47,847	\$36,770	\$81,712	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
9	Laboratory Packs	\$13,300	\$0	\$1,179	\$12,119	\$0	\$0	\$0	\$0	\$0	\$0	\$1,895	\$0	\$1,458	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
10	Above Ground Drums	\$120,000	\$0	\$0	\$12,743	\$6,900	\$40,490	\$10,465	\$11,411	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
11	Lagoons	\$163,000	\$2,708	\$0	\$351	\$0	\$1,369	\$0	\$0	\$0	\$41,031	\$104,839	\$117,185	\$67,188	\$7,712	\$52,582	\$598	\$0	\$0	\$0	\$0	
12	Asbestos	\$35,000	\$0	\$1,748	\$23,164	\$9,948	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
13	Buried Drums, Eastern 1/3 of site	Not Budgeted	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
14	Geophysical Study	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
15	Groundwater Wells	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,611	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
16	Soil Study Eastern 1/3 of Site & Disposal	\$40,000	\$0	\$0	\$0	\$0	\$0	\$12,192	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
17	Contaminated Soil Disposal, Eastern 1/3	Not Budgeted	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
18	Gary Airport Sewer Installation	\$140,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,569	\$1,081	\$0	\$0	
19	Level & Grade Site	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,372	\$874	\$35,342	\$0	\$0	\$0	\$0	\$0	\$0	
20	Final Report	\$27,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
21	Scrap Steel Dismantling	\$80,000	\$0	\$1,800	\$44,950	\$0	\$3,500	\$8,502	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
22	Scrap Credit	(\$37,832)	\$0	\$0	(\$27,629)	\$0	\$0	(\$8,374)	\$0	\$0	\$0	\$0	(\$1,469)	(\$122)	\$0	(\$238)	\$0	\$0	\$0	\$0	\$0	
***** ADDED ITEMS SINCE WORK BEGAN																						
23	TCE Contaminated Soils & Liquids	Not Budgeted	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
24	Rubber Lined Tanks	\$35,000	\$0	\$0	\$11,638	\$1,722	\$17,877	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
25	Oil Under Tank 56	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
26	Chromate Sludges	\$800	\$0	\$0	\$745	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
27	Property Line Fencing	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,664	\$0	\$0	\$0	\$0	
28	Buried Drums, Western 2/3 of site	Not Budgeted	\$0	\$0	\$0	\$0	\$0	\$0	\$2,300	\$15,841	\$0	\$1,200	\$0	\$27,289	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
29	Reclean Previously Cleaned Tanks	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
30	OSC Weekly Project Meetings	\$10,000	\$0	\$0	\$3,515	\$760	\$700	\$700	\$0	\$1,000	\$0	\$1,000	\$1,624	\$375	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
31	3rd Party Data Validation	\$15,000	\$0	\$0	\$1,897	\$0	\$4,298	\$0	\$0	\$0	\$0	\$0	\$595	\$541	\$978	\$627	\$0	\$0	\$0	\$569	\$0	
32	Health & Safety Meetings and Audits	\$15,000	\$0	\$0	\$523	\$1,368	\$0	\$0	\$0	\$601	\$656	\$0	\$0	\$1,832	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
33	Hexavalent Chrome in Lagoons	Not Budgeted	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
34	Required 24 hour site security	Not Budgeted	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TOTALS		\$2,220,466	\$31,769	\$123,541	\$255,805	\$114,964	\$168,486	\$88,775	\$94,410	\$114,347	\$118,250	\$246,102	\$194,167	\$167,340	\$95,790	\$91,138	\$33,491	\$14,617	\$2,469	\$5,254	\$1,634	

Note: Budget total has been changed to reflect scrap steel credits.

TABLE 8-1 (CONT.)

CONSERVATION CHEMICAL COMPANY OF ILLINOIS

Jan. 2001	Feb. 2001	Mar. 2001	Apr. 2001	May. 2001	June. 2001	Jul. 2001	Aug. 2001	Sept. 2001	Oct. 2001	Nov. 2001	Dec. 2001	Total Invoiced	Amount Remaining	Status of Tasks
\$1,122	\$0	\$526	\$0	\$290	\$303	\$136	\$0	\$264	\$3,492	\$0	\$2,028	\$537,419	\$212,581	Ongoing/Post Closure Monitoring
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$134,474	\$35,526	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,571	\$29	Complete/Demobilization cost Included In Task 1
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,219	(\$1,619)	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$46,931	\$14,069	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,866	\$7,134	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$32,014	(\$14)	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$429,162	\$20,838	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,451	(\$3,151)	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$82,009	\$37,991	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$395,559	(\$232,559)	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,860	\$140	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,611	\$6,389	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,192	\$26,808	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$169,428	(\$2,028)	\$177,050	(\$37,050)	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$68,588	(\$16,588)	Complete
\$1,950	\$6,683	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,633	\$15,367	Ongoing
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$58,752	\$1,248	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$37,832)	\$0	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,237	\$3,763	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$745	\$55	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,664	(\$19,664)	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$46,410	\$0	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,874	\$328	Ongoing
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,505	\$5,495	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,778	\$10,222	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Complete
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Complete/Included In Task 2
\$3,072	\$6,683	\$3,526	\$0	\$290	\$303	\$136	\$0	\$264	\$3,492	\$169,428	\$0	\$2,149,542	\$117,336	

9.0 POST REMOVAL SITE CONTROL

For a period of one (1) year after the performance of the activities outlined in this Work Plan, or as otherwise directed by the OSC, post removal site control measures will be implemented. These measures will include maintaining the integrity of the security fence installation surrounding the CCCI site and denying access to the site by securely locking the entrance gates. Access keys have been provided to the OSC and designated representatives of the PRP's.

On a quarterly basis, a representative of the PRP's will inspect the site to determine if the site security fence has been breeched or has deteriorated to the point of requiring repair and, to observe if any unauthorized circumstances have occurred which may have a significant adverse environmental impact on the CCCI site. The inspections commenced the quarter starting December, 2001 and will continue through the three month period ending November 30, 2002.

Any noteworthy observations will be reported in writing to the OSC or his designated representative within seven (7) days.

10.0 CERTIFICATION

Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, the information submitted is true, accurate, and complete.

Fuel G. Kuhn

Agent for the 6500 Industrial
Highway PRP Group

1 - 28 - 2002
Date

Subscribed and sworn to me before this 28th day of January, 2002



Kelly A. Spadoni
Notary Signature

505-0012-036
I. 3
4-8-03
EPA Region 5 Records Ctr.
207992

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT

I. HEADING

DATE: April 18, 2003
SUBJECT: **FINAL POLREP** Industrial Highway/Conservation Chemical Site, Gary, Lake County, IN
FROM: Steve Faryan, OSC, U.S. EPA, Region 5, ERB, RS1, Chicago, IL
TO: R. Worley, U.S. EPA, Regional Coordinator, OSWER (worley.ray@epa.gov)
R. Karl, U.S. EPA, Chief ERB, Chicago, IL (karl.richard@epa.gov)
W. Messenger, U.S. EPA, Chief ESS, Chicago, IL (messenger.william@epa.gov)
A. Marouf, U.S. EPA, H&S, Chicago, IL (marouf.afif@epa.gov)
C. Kawakami, U.S. EPA, ORC (kawakami.cynthia@epa.gov)
V. Mullins, U.S. EPA, ESS (mullins.valerie@epa.gov)
J. Maritote, U.S. EPA, ESS, Chicago, IL (maritote.john@epa.gov)
B. Kush, U.S. EPA, Chief OPA, Chicago, IL (kush.beverly@epa.gov)
M. Joyce, U.S. EPA, Public Affairs (joyce.mike@epa.gov)
USGC Case Officer, NPFC, Washington, DC (EPAPOLREPS@Ballston.uscg.mil)
Paul Karas, Administrator, Gary Chicago Airport FAX: 219-949-0573

II. BACKGROUND

CERCLA Site No: Z590
CERCLIS ID Number: IND040888992
Delivery Order Number: 3141-25
Response Authority: OPA/CERCLA
OPA ID Number: FPN#: 098022
Account Number: 90
NPL Status: Not on NPL
IDEM Notification: Yes
Start Date: Sept 1998
Completion Date: Pending

III. SITE INFORMATION

A. See POLREP 1-43 for previous U.S. EPA removal actions.

IV. RESPONSE INFORMATION

A. Situation

Construction and start up of the water treatment system was completed the week of March 17, 2003 at the Industrial Highway site. Demobilization of site equipment, personnel, and trailers was completed the week of March 24, 2003. Currently, water and product pumps in all extraction wells are operational as well as all other portions of the treatment system. Oil has been observed in extraction wells XW-1, XW-3, XW-5, and XW-6. Product pumps in these wells have begun pumping oil to the treatment building. No oil has been observed in well XW-4 and only trace amounts have been observed in well XW-2. Water pumps in these two wells will continue to operate in order to draw oil into the wells.

2. Completed activities:
Thursday, March 27, 2003, ERRS RM and START mobilized to the Industrial Highway site to gauge groundwater levels in all site monitoring wells and piezometers, as well as wells and piezometers on the airport property. After all wells and piezometers were gauged ERRS and START left site.

Thursday, April 3, 2003, ERRS RM and START mobilized to the Industrial Highway site to gauge groundwater levels in all site monitoring wells and piezometers, as well as wells and piezometers on the airport property. After all wells and piezometers were gauged ERRS and START left site.

Thursday, April 10, 2003, ERRS RM and START mobilized to the Industrial Highway site to gauge groundwater levels in all site monitoring wells and piezometers, as well as wells and piezometers on the airport property. After all wells and piezometers were gauged ERRS and START left site.

Thursday, April 17, 2003, ERRS RM and START mobilized to the Industrial Highway site to gauge groundwater levels in all site monitoring wells and piezometers, as well as wells and piezometers on the airport property. After all wells and piezometers were gauged ERRS and START left site.

3. Enforcement:
Refer to Action Memorandum

B. Next Steps
ERRS and START will continue to gauge water levels in all piezometers, monitoring wells, and extraction wells on a weekly basis until directed otherwise by the OSC. Water level data will be used to evaluate the operation and effectiveness of the treatment system. U.S. EPA will operate the collection of oil for 3 years. At that time the Gary Chicago Airport will have to assess whether they will continue operation of the oil collection systems.

C. Results Achieved
Installation and startup of a ground water treatment system consisting of six extraction wells, an oil water separator, and a water treatment building have been completed. The treatment system has begun pumping oil from the groundwater that exists on the industrial highway site property.

Over 1,700 tons of lead contaminated soil was fixated on-site and disposed of off site during the process of the treatment system construction.

D. Key Issues
Extraction wells XW-2 and XW-4 will continue to be evaluated. Attempts to promote oil production within these wells will continued.

V. COST INFORMATION (estimated as of March 18, 2003)

A CERCLA Funding (Conservation Chemical)		
	Total Cost To Date	Ceiling
ERRS	\$ 588,293.10	\$ 690,000.00
B. OPA Funding (Industrial Highway)		
	Total Cost To Date	Ceiling
ERRS	\$ 1,277,100.34	\$ 1,500,000.00
START	\$ 40,693.45	\$ 41,275.00
Total	\$ 1,317,793.79	\$ 1,541,275.00

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

VI. Waste Disposal

Waste	Treatment	Loads	Tons	Disposition of Waste
Lead contaminated soil	Stabilized with lime kiln dust	66 loads	1,706.85 tons	Newton County Landfill, Newton County, IN.

APPENDIX R

STATE OF INDIANA

OFFICE OF THE ATTORNEY GENERAL



INDIANAPOLIS 46203

1330 West Michigan Street

1330 West Michigan Street
Indianapolis, Indiana 46203

RIVER POLLUTION CONTROL BOARD

December 29, 1972

VIA CERTIFIED MAIL

Mr. Norman J. Hjersted, President
Conservation Chemical Company of Illinois
6500 Industrial Highway
Post Office Box 6066
Gary, Indiana 46406

Dear Mr. Hjersted:

Re: Industrial Waste

For your consideration, we are enclosing three copies of an Agreed Order that contains time schedules for neutralizing of wastes, filling of earthen lagoons and providing proper storage of materials to be processed in the Company's manufacturing process.

The following timetable appears in the Agreed Order:

1. Neutralization of all materials now in lagoons or basins, removal of all wastes, treated or untreated and disposal according to state laws within sixty days from date of this Agreed Order.
2. Filling of lagoons and basins with inert materials, and provide proper storage for materials to be neutralized within 90 days of the date of this Agreed Order.
3. Provide an inventory of materials on the premises and provide a monthly inventory as per the provisions of the Agreed Order.
4. Submission of plans for a sanitary sewage treatment system within sixty days of the date of the Agreed Order.
5. Completion of sewage treatment system within 120 days of the date of Agreed Order.

The enforcement hearing has been rescheduled to 9:30 a.m., January 17, 1973, at the offices of the State Board of Health, 1330 West Michigan Street, Indianapolis, Indiana. If the agreement is signed prior to January 17, 1973, the enforcement hearing will be cancelled.

Mr. Norman J. Hjersted

December 29, 1972

Please sign (2) two copies of the enclosed Agreed Order and return them to my office, as soon as possible. If you have any questions, please contact Mr. Samuel Moore of my staff at 317/633-4941.

Very truly yours,

Oral H. Hert

Oral H. Hert
Technical Secretary

RJCleaton/sjr
Enclosures

Conservation Chemical Co

9-6-77

Gary

Lake

Gary Shepper

routine plus follow-up

Chemical disposal facility

none

city

none

septic

nil

none

none

X

A

R. Cleaton

This Company has been under Court order to perform certain functions to clean up its plant premises so as to not endanger the water table land, etc by pullution. This inspection, therefore, was to determine if the Company had carried out the orders of the Court.

Inspection revealed that 99% of the Court order had been complied with. Oil had been removed from standing water around an oil storage tank, drums of chemicals had been shipped to the Company's other Division for disposal. The area had been leveled and an attempt been made to present a neat appearance. This last pahase needs more work.

Present were drums of cyamide containing material. It was explained that these drums were collected until it was profitable to make one shipment rather than many small shipments. This practice will be tolerated by the writer-inspector until it is getting out of hand.

The Company reports that their volume of business from neutralization of chemicals is practically nil and they are conceentrating on the sale of chemicals for Sewerage plants. They are not, I'm told soliciting business for neutralization. The tanks of old sludges however are still full and they are trying to dispose of these sludes in acceptable fashion.

Will require less surveillance.

September 16, 1977

To: J. Kreiger, Mike Shaffer, AG's Office
From: R. Cleaton
Subject: Conservation Chemical Co, Gary

The subject Company has been under order from Lake Count Circuit Court to remove harmful chemicals, clean up spilled oil and other various potential water polluting hazards.

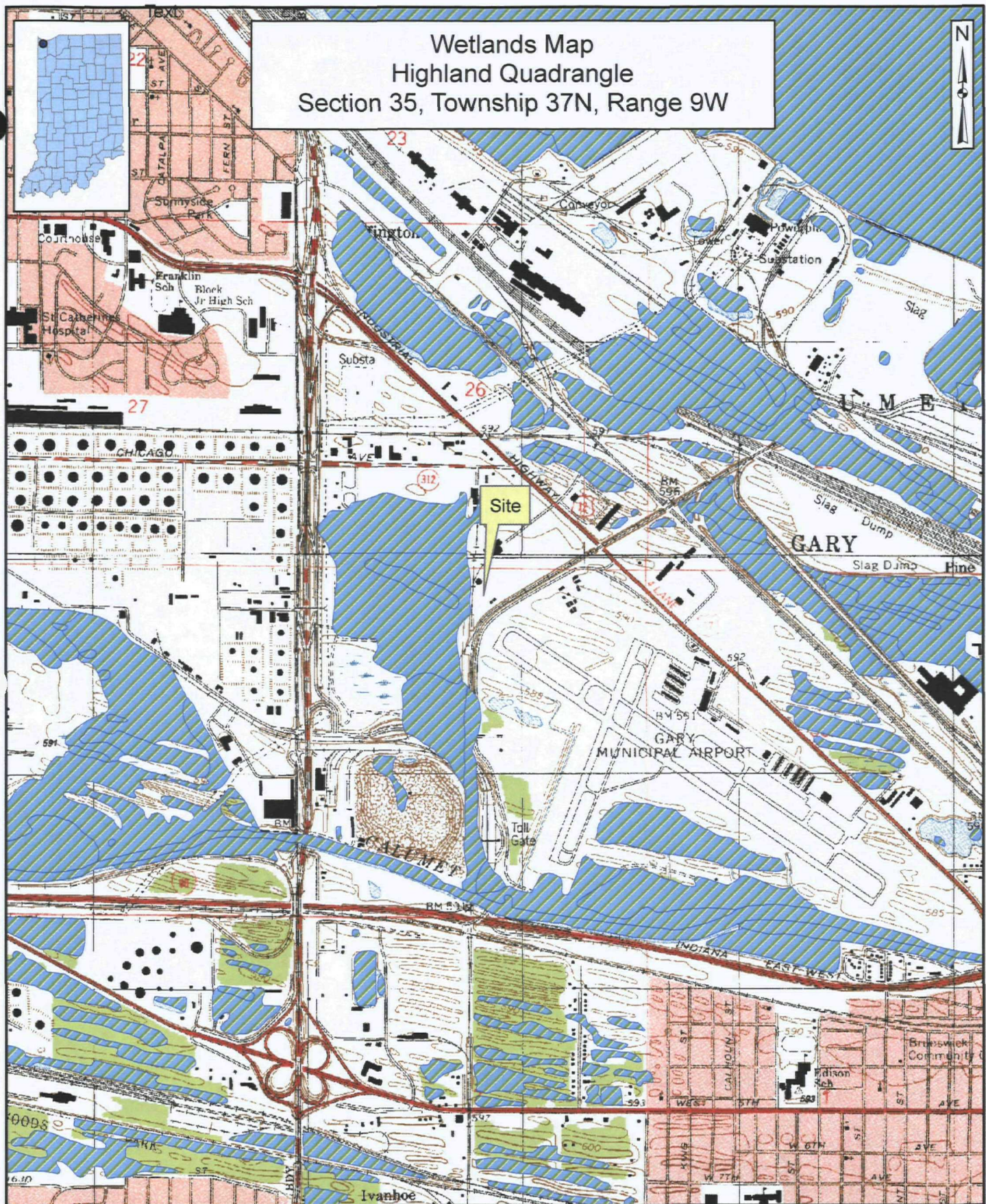
A recent inspection conducted September 6, 1977, showed that the Company has fulfilled 99% of its obligations as directed by the Court order. Inspection showed that the oil has been removed from the water surrounding an oil storage tank, chemicals have been transported to the Company's facility located at Kansas City, Missouri, for disposal and the grounds leveled and cleaned within reasonable factory-manufacturing operations.

There were drums of chemicals on the premise but these drums were those necessary for the Company to conduct its business and it was explained that these chemicals were accumulated until it was profitable to make a load for shipment to the disposal facilities at the other Division.

I am therefore suggesting that further legal action on this cause be dropped.

If further inspections reveal that the Company is "backsliding" I will request that necessary action be instituted.

Wetlands Map
Highland Quadrangle
Section 35, Township 37N, Range 9W



Base Map: USGS Digital Raster Graphic Enhanced (DRGe)



QUALITY ENVIRONMENTAL
PROFESSIONALS, INC.
1611 South Franklin Road
Indianapolis, Indiana 46239

WETLANDS MAP

CONSERVATION CHEMICAL
6500 INDUSTRIAL HIGHWAY
GARY, INDIANA

Project Number:	Date:
07-05-022	7/19/07
Drawn By:	Scale:
CWH	1"=400'
Checked By:	Sheet:
NRV	1

Nivas R. Vijay

Mr. Vijay graduated from Purdue University with a Bachelors of Science Degree in Geology with Minors in Anthropology & History. He is an Indiana licensed Well Water driller, an Indiana accredited asbestos inspector, and an Indiana licensed Underground Storage Tank Decommissioning inspector. Mr. Vijay is employed at Qepi as a Project Manager in both the Indianapolis Office and the Great Lakes Regional Office in South Bend, Indiana performing a variety of duties. Mr. Vijay has experience in all phases of monitoring well installations, overseeing the construction, development, sampling, and abandoning of wells. Mr. Vijay has logged and analyzed soil following the advancement of soil borings with the use of a hand auger, drill rig, and GeoProbe rig. He has also aided in the installation of environmental remediation systems and also assisted in the daily operations and maintenance of remediation systems.

Mr. Vijay has performed research and development in areas of regions of impacted groundwater, determining confined and unconfined aquifers, determining flow paths, and calculating hydraulic conductivity by slug and pump test analysis. Mr. Vijay has also organized and performed vacuum test events and vacuum extraction events as part of site investigations and site remediation actions involving sites with soil and groundwater impacts. As part of the due diligence process, Mr. Vijay has completed numerous site walk-throughs, historical data review, regulatory review and report preparation.

Mr. Vijay currently serves as project manager for numerous sites with varying degrees of chemical impacts to soil and groundwater. Mr. Vijay has experience managing projects enrolled in the Indiana Voluntary Remediation Program, Indiana State Cleanup Program, and the Indiana Environmental Liability Trust Fund (ELTF) Program. Mr. Vijay also has experience managing projects in the State of Illinois and has conducted project work with the United States Environmental Protection Agency.

Mr. Vijay also has experience in Indiana working with Brownfields redevelopment projects. Mr. Vijay has completed site assessments, assisted in the procurement of funding and conducted remedial studies and remediation plans for numerous Brownfields redevelopment projects.

Philip N. Ward, LPG

BS Geology

Mr. Ward is the Director of Geologic Services managing a variety of environmental projects. Mr. Ward has more than 27 years of experience working for regulatory and non-regulatory government agencies, geotechnical engineering, civil engineering and geology/environmental consulting firms. Mr. Ward is a Licensed Professional Geologist in the State of Indiana and is a past President of Indiana Water Resources Association and Indiana Geologists organizations. Mr. Ward has experience with the development of business, office and department budget management, proposal preparation for project scope and budget for a variety of project types, including Phase I and Phase II

Environmental Site Assessments, wetland assessments, wetland mitigation design, wetland permitting, underground storage tank properties, Brownfield re-development properties, and commercial and industrial properties.

Mr. Ward's responsibilities also included subcontractor fee negotiation and contracting, supervision of staff, development and management of task specific health and safety plans, presentation of monthly health and safety meetings, project management, invoicing and preparation of Brownfield site assessment grant applications.